This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

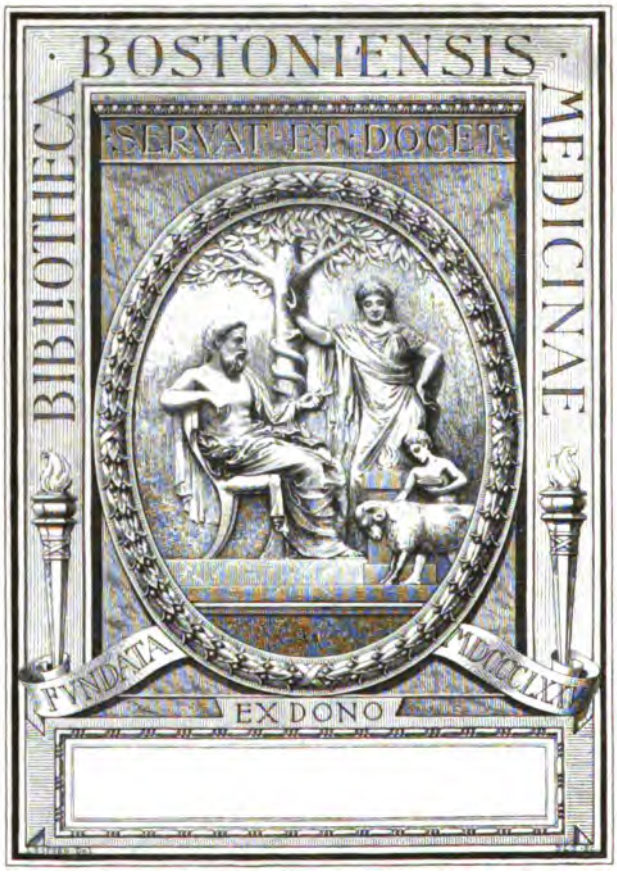
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`


BOSTONIENSIS
BIBLIOTHECA
MEDICINAE
SERVAT ET DOCET
FVNDATA
MDCCLXX
EX DONO

The Wisconsin Medical Journal.

Official Organ of the State Medical Society of Wisconsin.

A Monthly Journal of Medicine and Surgery.

EDITOR:
ARTHUR J. PATEK, A. B., M. D.

ASSOCIATE EDITORS:
CHAS. S. SHELDON, M. D.
HOYT E. DEARHOLT, M. D.
OTTO H. FOERSTER, M. D.
ALBERT W. MYERS, M. D.

VOLUME II.

JUNE, 1903 — MAY, 1904.

Milwaukee:
The Wisconsin Medical Journal Publishing Company.
1904.

BOSTON MEDICAL
SEP 23 1904
LIBRARY.

CATALOGUED
SEP 23 1904
E. H. B.

Contributors of Original Articles to Volume II.

Abt, Isaac A., M. D., Chicago.
Albers, H. H., M. D., Allenton.

Bach, James A., M. D., Milwaukee.
Brown, Robert C., M. D., Milwaukee.

Conkey, C. D., M. D., West Superior.
Cutler, J. C., M. D., Verona.

Dewey, Richard, A. M., M. D., Wauwatosa.
Dodd, J. M., Ashland.

Earles, W. H., B. Sc., M. D., Milwaukee.
Edwards, Arthur R., A. M., M. D., Chicago.

Fish, E. F., M. D., Milwaukee.
Fox, Philip R., M. D., Madison.
Fuchs, A. F., M. D., Loyal.

Gibson, A. D., M. D., Park Falls.
Heising, A. F., M. D., Menomonie.
Hektoen, Ludvig, M. D., Chicago.
Herrick, James B., M. D., Chicago.
Hitz, Henry B., M. D., Milwaukee.
Holbrook, Arthur T., M. D., Milwaukee.

Jackson, Reginald H., M. D., Madison.
Jermain, L. F., M. D., Milwaukee.

Kletzsch, Gustave A., M. D., Milwaukee.

Lemon, Charles H., M. D., Milwaukee.
Lyman, J. V. R., M. D., Eau Claire.

Mayo, William J., A. M., M. D., Rochester, Minn.
Myers, Albert W., M. D., Milwaukee.

Neilson, W. H., M. D., Milwaukee.
Noer, Julius, M. D., Stoughton.
Nuzum, T. W., M. D., Brodhead.
Nye, F. T., M. D., Milwaukee.

Patek, A. J., A. B., M. D., Milwaukee.
Patrick, Hugh T., M. D., Chicago.
Pearce, F. Savary, M. D., Philadelphia.
Pfister, F., M. D., Milwaukee.
Portis, M. Milton, B. S., M. D., Chicago.
Prince, L. H., M. D., Palmyra.
Puls, A. J., M. D., Milwaukee.

Reineking, H., M. D., Milwaukee.
Rogers, Arthur W., M. D., Wauwatosa.
Rogers, John T., M. D., St. Paul, Minn.

Sarles, W. T., M. D., Sparta.
Seaman, Gilbert E., M. D., Milwaukee.
Sears, H. B., M. D., Beaver Dam.
Sheldon, W. H., M. D., Madison.
Studley, F. C., M. D., Milwaukee.

Thomson, Bertha E., M. D., Oshkosh.

Washburn, Wm. H., M. D., Milwaukee.
Webster, J. Clarence, M. D., Chicago.

Yates, John L., M. D., Philadelphia.

INDEX.

PAGE

Abdominal Case, An Unusual..... 390
Abt, Isaac A., Syphilis Hereditaria Tarda 539
Acholia 195
Acromegalia 684
Address, Annual of President of State Medical Society of Wisconsin.. 147
Adenoids, Remote Sequelae of..... 360
Adrenals, Tuberculosis of, Case of..... 231
Albers, H. H., Neurasthenia..... 726
Albumen as Diet for the Sick..... 530
Albuminuria in the Apparently Healthy.. 484
Physiological or Functional 709
Alkalinity of Urine, Acid Soda Phosphate in..... 531
Amblyopia, Toxic, from Coffee..... 139
Anemia, Pernicious..... 126
Aneurysm, Aortic 517
Dissecting, of Aorta.....113, 418
Traumatic, of Gluteal Artery.. 470
Treatment of, by Subcutaneous Injection of Gelatin..... 594
Antrum, Transillumination of..... 138
Apparatus, Hyperemia-Producing..... 712
Appendicitis, Cases of, With Deductions.. 177
Chronic 198
Pneumonia and Pleurisy in Early Life Simulating..... 404
With Intestinal Hemorrhage Resembling Typhoid Fever 133
Argentum Catarrh of the New-Born..... 138
Arterioscleroses, Dietetic Treatment of.. 709
Arteritis 581
Arthritis Deformans..... 383
In Blennorrhea Neonatorum..... 533

Bach, James A., Significance of Perforating Wounds of the Eyeball..... 427
Backache, Clinical Observations of..... 214
Berlin Letter 737
Bier Treatment of Joint Diseases..... 741
Blennorrhea Neonatorum, Arthritis in..... 533
Blood, Bacteriologic Examination of, During Life..... 157
Bone Marrow, Therapeutic Properties of.. 80
Book Reviews:
Cajal, S. Ramon y, Studies of the Cortex of the Human Brain..... 467

PAGE

Dunglison, Robley, and Stedman, Thos. L., Dictionary of Medical Science 466
Kelly, A. O. J., International Clinics, Vol. 1, 2..... 341
Vol. 3, 4..... 706
Koenigsberger, Leo, Hermann v. Helmholtz ..... 123.
Levings, A. Hamilton, Aetiology, Pathology, Diagnosis and Treatment of Tumors..... 466
Matthes, Max, Lehrbuch der Klinischen Hydrotherapie..... 707
Patton, Jos. M., Anesthesia and Anesthetics, General and Local..... 122
Salkowski, Prof. Dr. E., Practicum der Physiologischen und Pathologischen Chemie 758
Stearns, Frederick and Co., The Streptococcus and Streptolytic Serum 468
Vaughn, Geo. Tully, Principles and Practice of Surgery..... 486
Wright, Jonathan, Manhattan Eye and Ear Hospital Reports, No. III 760
Bromoderma Pustulo-Tuberosum..... 35
Brown, Robert C., Depurative Function.. 606

Cancer of Stomach, Early Diagnosis of... 75
Cellulitis, Orbital, Sequel of Scarlatina.. 139
Cesarian Section, Case of Dwarf Pelvis 679
Childbed Period, Management of Mother During 443
Chloroform, Fatal Effects of, on Children With Peculiar Condition of Fatty Liver..... 212
Colitis, Surgical Treatment of..... 470
Congress, XIV. International, of Medicine 46
Conkey, C. D., Remote Sequelae of Adenoids 360
Contusion, Abdominal, Intestinal Injuries Following 75
Corneal Ulceration Due to Nasal Infection 763
Coxa Vara as a Static Deformity..... 233
Cutler, J. C., Case of Dwarf Pelvis With Cesarean Section..... 679
Cyanosis, Chronic, With Polycythemia and Enlarged Spleen..... 403

PAGE

Dacryo-Cystitis, Modern Treatment of.. 761
Deformities, the Result of Fractures, How to Prevent 469
Deformity, Nasal, Correction by Paraffin 567
Delirium After Eye Operations..... 761
Depurative Function..... 606
Dewey, Richard, Syphilis as a Cause of Psychoses 718
Diabetes Mellitus..... 655
Albuminuria in..... 403
Treatment of, With Oatmeal 403
Diabetics, Dietetics of, Improvements in 708
Diarrheas, Summer, of Children, Pathology of 140
Diet During Pregnancy, Influence of, Upon Offspring 282
Digestion in Infancy..... 90
Digestive Organs, Acute Infection of, in Nurslings 132
Dionin 763
Directory of County Societies.....648, 696, 750
Disinfectant, Sulphurous Acid as a..... 654
Dislocation of Hip, Congenital..... 214
Shoulder, Humeroacromial Suture for..... 212
Diverticulum, Oesophagus..... 136
Dodd, J. M., Immunity and Its Relation to Surgical Pathology..... 305
Dwarf Pelvis With Cesarian Section..... 679

Ear, External, Inflammatory Conditions of 497
Earles, W. H., Surgical Progress..... 610
Editorial Comment, 36, 102, 178, 234, 310, 376, 450, 508, 570, 630, 686..... 732
Edwards, Arthur R., Nephritis, Its Diagnosis, Particularly of Atypical Forms, and Some Points in Its Treatment..... 1
Endocarditis in Childhood, Etiology of.... 130
Influenzal 135
Malignant, Resemblance of, to Typhoid and Paratyphoid Infections..... 72
Epilepsy, Prognosis and Curability of... 210
Epiphyseolysis, Bloodless, Operative, in Genu Valgum Adolescentium 592
With Subcutaneous Periosteotomy in Genu Valgum Infantum..... 214
Erysipelas 132
Esophagus Diverticulum..... 136
Ethyl Chloride as a General Anesthetic.. 504
Exophthalmic Goitre (See Graves' Disease). .....
Extirpation of Gall Bladder, Indications for 76
Extrauterine Pregnancy..... 581

PAGE

Eyeball, Perforating Wounds of, Significance of..... 427
Eye, Injuries of, by Chemicals..... 138
Operations, Delirium After..... 761
Facial Nerve, Surgical Relation of..... 138
Facial Palsy, Neural Anastomosis in.... 762
Fibroids, Uterine, Myomectomy of..... 618
Fish, E. F., Practice of Obstetrics..... 547
Flatfoot and Scoliosis..... 712
Fox, Philip R., Strangulated Hernia..... 535
Fractures, Compound, Moist Dressing in.. 27
Fuchs, A. F., Shortcomings of the Physician 350

Gage, Martin Rockwell..... 590
Gallbladder, Indications for Extirpation of 76
Gallstone Operation, Permanency of cure After 651
Gastric Ulcer, Surgical Treatment of..... 76
Surgery of..... 470
Gelatin, Subcutaneous Injection of, in Aneurism 594
Genu Valgum Adolescentium, Bloodless, Operative Epiphyseolysis in 592
Infantum, Epiphyseolysis With Periosteotomy..... 214
Gibson, A. D., Management of the Mother During Childbed Period..... 443
Goitre 345
Gonococcus of Neisser, Pneumonia Due to 136
Gonorrhea in Female, Treatment of..... 192
Gonorrhoic Infection, Treatment of..... 701
Graves' Disease, Operative Treatment of.. 211
Sodium Sulphanilate in.. 531
Treatment of..... 662
Gynecology and Obstetrics in Vienna..... 314

Headache, Ocular, and Ocular Reflexes.... 532
Heising, A. F., Acromegalia..... 684
Hektoen, Ludvig, Practical and Scientific Value of Bacteriologic Examinations of the Blood During Life..... 157
Hematoma, Intra-Pelvic..... 638
Hemiplegia, Syphilitic, Toxemic..... 342
Hemorrhage Into Cranial Cavity Following Injury to Skull..... 218
Henoch's Purpura, Case of..... 404
Hernia, Strangulated..... 535
Pathology and Therapeutics of..... 652
Umbilical, Overlapping Operation for Radical Cure of..... 212
Herpes Zoster, Perineal..... 637
Herrick, James B., Some of the More Modern Views Concerning Typhoid Fever 405
Hip Disease, Observations on..... 711
Hitz, Henry B., Nasal Deformity Corrected by Paraffine Method..... 567

PAGE

Holbrook, Arthur T., Manifestations of Rheumatism in Infancy and Early Childhood 666
Humero-Acromial Suture, Dislocation of Shoulder 212
Hysteria, Diagnosis of..... 283

Immunity, Relation to Surgical Pathology 305
Indigestion, Causes and Effects..... 367
Infancy, Digestion in..... 90
Infant Feeding..... 622
Pure and Impure Milk in.. 528
Mortality, Reduction of, in New York..... 529
Infectious Diseases, Recent Investigations in 391
Influenza, Cough in, Simulating Whooping-Cough 372
Influenzal Endocarditis..... 135
Injuries of Eye by Chemicals..... 138
Inoculations, Therapeutic, of Bacterial Vaccines 125
Intestinal Injuries Following Abdominal Contusion 75
Parasites, Clinical Diagnosis of 316
Iodism, Cause and Prevention of..... 531
Iodoform Poisoning, Optic Atrophy Following 763

Jackson, Reginald H., Vesical Calculi, Report of 15 Cases..... 490
Jermain, L. F., Diagnosis of Pericarditis 173

Keloids, Multiple Spontaneous..... 80
Kerato-Iritis, Double Congenital..... 764
Kidney, Diseases of, Cardiac Hypertrophy in..... 74
(See Also Nephritis.)
Diagnosis of Diseases and Functional Activity of..... 127
Movable, Observations on..... 134
Kletzsch, Gustave A., Displacement of the Uterus..... 295
Knee Joint, Flexion Deformity at, New Method of Correcting..... 79
Pathology of, Significance of Fatty Tissue in..... 711

Labor, Better Care of Women After..... 282
Ocular Injuries During..... 761
Law in Relation to Medicine..... 42
Lemon, Charles H., Hemorrhage Into the Cranial Cavity Following Injury to the Skull..... 218
Moist Dressing in the Treatment of Compound Fractures..... 27
Leukemia, Myelogenous, Case of..... 120

PAGE

Lorenz Operations in Chicago, Present Status of..... 636
Lyman, J. V. R., Annual Address of the President of the State Medical Society of Wisconsin..... 147
Lymphatic Constitution..... 471

Mack, Edwin S., Law in Relation to Medicine 42
Malnutrition 120
Management of Mother During Childbed Period 443
Mask to Prevent Infection with Tuberculosis 141
Mayo, William J., Present Status of Surgery of the Stomach..... 82
Measles, Prevention of..... 143
Membership of State Medical Society of Wisconsin 196
Meningitis, Cerebrospinal, Purulent, Optic Nerves in..... 533
Menstruation, Vicarious..... 739
Microscopic Aids in Diagnosis..... 742
Migraine, Treatment of..... 131
Milk, Sterilized, Pasteurized, or Clean.... 140
Moist Dressing in Treatment of Compound Fractures 27
Monoplegia, Brachial, of Hysterical Origin, Following Dogbite..... 387
Morton's Painful Disease of Toes..... 710
Murmers, Diastolic Without Lesions of Aortic or Pulmonary Valves..... 71
Mydriatics 534
Myelogenous Leukemia, Case of..... 126
Myers, Albert W., Digestion in Infancy.. 90
Myomectomy of Uterine Fibroids..... 618

Neilson, W. H., Diabetes Mellitus..... 655
Nephritis (See Also Kidney, Diseases of)
Chronic, Dietetic Treatment of 530
Diagnosis, Particularly of Atypical Forms, and Some Points in Treatment..... 1
Neural Anastomosis in Facial Palsy..... 762
Neuralgia, Relation of, to Altitude..... 215
Neurasthenia 726
News Items, 40, 110, 183, 240, 321, 380, 455, 514, 578, 635, 690..... 735
Noer, Julius, Case of Tuberculosis of the Adrenals, with Pathologic Specimens... 231
Nusum, T. W., Prostatectomy..... 433
Nye, F. T., Septal Deflections, Their Consequence and Treatment..... 560

Obituaries:
Martin Rockwell Gage..... 590
Rush Winslow..... 589

PAGE

Obstetrics and Gynecology in Vienna..... 314
Practice of..... 547
Ophthalmia, Metastatic..... 533
Optic Atrophy Following Iodoform Poisoning 763
Nerve in Brain Diseases, Pathology of 533
Cerebrospinal meningitis..... 533
Osteo-Arthritis, Condition of Blood in.... 598
Otitis, Chronic Suppurative, Prognosis in 532

Pancreas, Cysts and Neoplasms of..... 134
Pancreatic Hemorrhage..... 113
Pancreatitis, Acute, Diagnosis and Treatment of..... 652
Paraffine Injection Into Nose, Embolism of Central Artery of Retina From 534
Method, Nasal Deformity Corrected by..... 567
Paralyses, Facial, Old Peripheral, Pathology of..... 343
Peroneal, Operative Treatment of 79
Paralysis, Spastic, Treated by Transposition of Hamstring Tendons..... 712
Parasites, Intestinal, Clinical Diagnosis of 316
Patek, A. J., Cough in Influenza Simulating Whooping Cough..... 372
Patrick, Hugh T., Diagnosis of Hysteria 283
Pearce, F. Savary, Relation of Neuralgia to Altitude 215
Pemphigus, Acute Contagious, in Newly-Born 597
Vegetans 81
Pensioned Disabilities, Etiology of, Measured by Modern Pathology..... 291
Pericarditis, Diagnosis of..... 173
Peritonitis, Diffuse, Treatment of Peritoneum in..... 468
General, Following Typhoid Perforation 518
Gonococcal, in Young Girls... 529
Pernicious Anemia..... 126
Peroneal Paralysis, Operative Treatment of 79
Pfister, F., Ethyl Chloride as a General Anesthetic 504
Phototherapy, Present Status of..... 595
Physical Training, Briefs on..... 77
Placenta Previa with Transverse Position 326
Platinum Rhinitis 762
Pleurisy, Abdominal Pain in, and Pneumonia 594
And Pneumonia in Early Life Simulating Appendicitis..... 404
Serofibrinous, Etiology of..... 205

PAGE

Pleuritis Pulsans Dextra, Case of..... 101
Pneumonia, Abdominal Pain in, and Pleurisy 594
And Pleurisy in Early Life Simulating Appendicitis..... 404
Cardiac Toxemia of, Treatment of..... 593
Due to Gonococcus of Neisser 136
Treatment of..... 708
Unresolved, New Treatment of 131
Portis, M. Milton, Case of Bromoderma Pustulo-Tuberosum 35
Poultice, an Aseptic..... 519
Pregnancy, Effect of Toxemia of, upon Cardio-Vascular System..... 282
Prince, L. H., Chronic Appendicitis.. Report of Two Cases with Obscure Symptoms 98
Prostatectomy 433
Perineal 383
Prostate, Senile Hypertrophy of, Radical Cure of..... 703
Prostatic Hypertrophy..... 651
Pruritis, Lactic Acid for..... 531
Pseudo-Pertussis 372
Psychoses, Syphilis as Cause of..... 718
Pulmonary Disease, Open Air Treatment for 375
Puls, A. J., Myomectomy of Uterine Fibroids 618
Purpura, Henoch's..... 404

Redlight Treatment of Smallpox..... 209
Reineking, H., Spina Bifida..... 599
Rheumatism, in Infancy and Early Childhood 666
Rheumatoid Arthritis, Condition of Blood in 598
Rhinitis, Platinum 762
Ringworm, Treatment of..... 80
Roentgen Rays in Dermatology 596
Diagnosis of Pulmonary Disease 208
Rogers, Arthur W., Treatment of Grave's Disease 662
Rogers, John T., Goitre..... 345

Sarles, W. T., Etiology of Some Pensioned Disabilities Measured by Modern Pathology 291
Scoliosis and Flatfoot..... 712
Scoliotic Curvature, Regions of Predilection in..... 712
Seaman, Gilbert E., Inflammatory Conditions of External Ear..... 497
Sears, H. B., Indigestion, a Few of Its Causes and a Few of Its Effects..... 367
Sheldon, W. H., Lymphatic Constitution. 471

PAGE

Shortcomings of the Physician..... 350
Silver Nitrate Injections in Infections.... 581
Smallpox, Red-Light Treatment of..... 209

SOCIETY PROCEEDINGS:

County Societies:
Ashland 522
Barron-Gates-Polk 278, 522
Brown 188
Chippewa 394
Columbia 278
Dane 394, 751
Dodge 121, 585
Douglas 189, 394, 522
Dunn 523, 697
Eau Claire 458
Fond du Lac..... 458
Forest 697
Grant 189, 325, 523, 585
Green 395, 697
Green Lake 524
Iowa 326, 458
Iron 458, 524
Jefferson 121, 395, 524
Juneau 395, 525
La Crosse.....70, 278, 395, 458, 585, 649, 751
La Fayette.....396, 649, 698
Langlade 396, 525
Lincoln 459, 526
Manitowoc 586
Marathon 459
Marinette 649
Marquette 396
Milwaukee.69, 190, 396, 459, 525, 649, 698, 751
Monroe 397, 460
Oneida 460
Outagamie 397, 460, 650
Portage 325
Price 460
Racine 586
Sauk 325
Shawano 525, 752
Sheboygan 526
St. Croix 190, 461, 650
Taylor 461
Trempealeau 698
Vilas 699
Washburn-Sawyer-Burnett 278, 461, 752
Washington.....191, 279, 397, 526, 699
Waukesha 121, 461
Waupaca.....191, 397, 586, 699
Winnebago 398, 462, 526
Wood 71

State Medical Society of Wisconsin:
Anniversary Banquet of..... 275
Announcement 456
for 1904 Meeting of.. 322
Annual Meeting, 57th of..... 52
Constitution and By-Laws of.....331

PAGE

Council, Meeting of.....392,583
Provisional, Meeting of... 66
County Reorganization 186
Members, New, Admitted During Session of 1903..... 276
Membership of..... 196
Minutes of 57th Annual Session of 244
Organization Notes 242, 323, 392, 456, 520, 582, 640, 694..... 744
Program, Preliminary 746
Reorganization, an Expression on.. 642
Brainard Medical Society.....122, 191, 398
Central Wisconsin Medical Society....192, 280
Fox River Valley Medical Society 281, 399, 586, 699..... 752
Inter-County 281
Milwaukee Medical Society, 67, 120, 400, 462, 526, 588, 650, 700..... 753
Northwestern Wisconsin Medical Association 754
Philadelphia County Medical Society, Northwestern Branch of..... 701
Philadelphia Obstetrical Society.....192, 326
Society of German Physicians at Milwaukee, 463, 527, 589, 651.....701
Tenth District Medical Association..... 754
West Wisconsin Medical Society..... 462
Wills' Hospital Ophthalmic Society..464, 755
Spina Bifida..... 599
Spinal Cord, Tumor in..... 637
Stomach, Cancer of, Importance of Early Diagnosis of..... 75
Surgery in Vienna..... 515
of, Clinical Observations in 133
Present Status of.... 83
Ulcer of, an Aid to Diagnosis of 72
Strangulated Hernia 535
Pathology and Theratics of 652
Studley, F. C., Congenital Transposition of Viscera, Diagnosed During Life..... 478
Sublamine 763
Sulphurous Acid as a Disinfectant..... 654
Surgical Progress 610
Syphilis as a Cause of Psychoses..... 718

Testicle, Undescended, Surgical Treatment of 468
Thomson, Bertha E., Infant Feeding..... 622
Torticollis, Spasmodic, Successfully Treated by Hypodermic Injections of Atropin..... 51
Spastica, Symptomatology and Therapy of..... 77
Trachoma Bacillus, Mueller's..... 764

PAGE

Transillumination of the Antrum..... 138
Transposition of Viscera, Congenital..... 478
Tuberculosis, Mask to Prevent Infection with 141
Mode of Infection in, and Measures for Its Prevention 142
Of the Adrenals, Case of 231
Pulmonary, Study of Weight in 73
(See Pulmonary Disease.)
Typhoid and Paratyphoid Infections, Resemblance of Malignant Endocarditis to..... 72
Fever, Management and Treatment of..... 593
Modern Views Concerning..... 405
Occurrence and Mortalty of, in Infants and Children..... 129

Ulcer, Chronic, of Leg..... 131
Gastric, Surgery of..... 470
Surgical Treatment of.... 76
Of Stomach, Aid to Diagnosis of.. 72
Urethra, Normal Male, Bacterial Findings in.....598
Urinary Pigment, Diagnostic Value of Quantitative Determination of..... 74

PAGE

Uterine Fibroids, Myomectomy of..... 618
Tumors, Two Laparotomies for Removal of..... 313
Uterus, Displacement of..... 295

Vaccine Pulp, Destruction of Bacteria in, with Potassium Cyanide..... 597
Virus, Government Investigation of 653
Vaccines, Bacterial, Theurapeutic Inoculations of.....125, 146
Vaginal Section, Scope of..... 713
Vesical Calculi, Report of 15 Cases..... 490
Vesico-Uretero-Pyelo-Nephritis 317
Vital Statistics..... 82

Washburn, Wm. H., Albuminuria in the Apparently Healthy 434
Webster, J. Clarence, The Scope of Vaginal Section 713
Winslow, Rush..... 589
Wounds from Modern Agricultural Implements 134
Wryneck, Congenital 598
Spastic, Symptomatology and Therapy of..... 77

Yates, John L., Dissecting Aneurism of the Aorta With Report of a Case..... 418

BOSTON MEDICAL
SEP 23 1904
LIBRARY.
8264

THE WISCONSIN

MEDICAL JOURNAL

JUNE, 1903

NEPHRITIS, ITS DIAGNOSIS, PARTICULARLY OF ATYPICAL FORMS, AND SOME POINTS IN ITS TREATMENT.*

BY ARTHUR R. EDWARDS, A. M., M. D.

Professor of Principles and Practice of Medicine and Clinical Medicine, Northwestern University Medical School; Attending Physician to Mercy, Wesley, Cook County and St. Luke's Hospital.

CHICAGO.

In this paper it is not my purpose to discuss the subject exhaustively but rather to consider certain characteristics of nephritis and some unusual and atypical features.

Cases of acute and chronic nephritis are usually diagnosticated with ease when the urine of every patient is examined systematically, repeatedly, and from twenty-four-hour specimens, considering the specific gravity, gross amount of solid excretion, albumin, and microscopic morphology—casts, blood, pus, etc. It is justly believed that care in the directions indicated insures accurate diagnoses, a supposition in the main correct, and yet subject to various clinical errors. Considering, then, under the head of diagnosis exceptional clinical features, the amount of urine may decrease in the terminal stage of interstitial nephritis, or be constantly small when cardiac hypertrophy fails to develop, for example, in parenchymatous types, or when, in interstitial forms, general nutrition is sufficiently impaired to preclude the usual myocardial hyperplasia and hypertrophy. Low specific gravity and decrease in total solids may indicate persistent functional inadequacy rather than organic renal disease. Albumin is found in most cases in which repeated examination is made of the daily quantity passed. It goes without saying that analysis of single specimens is particularly

*The Annual Address in Medicine. Read at the Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 5, 1903.

deplorable from the obvious and often vainly emphasized errors incident to such superficial examination. Clinical experience teaches that we often rely with a sense of false security upon signs and symptoms generally regarded as classical or infallible. Hence we are subsequently astonished at the pathological lesions revealed at autopsy. This statement applies particularly to albuminuria in nephritis. I am certain we overlook both acute and chronic nephritis in regarding albuminuria as a certain or constant symptom. Nephritis without albuminuria certainly exists, although reference to the subject is very meagre in established and current literature. In speaking of albuminuria, I purposely avoid discussion of the temporary, spurious, cyclical or so-called physiological secretion of albumin.

Casts may be found at intervals when albumin is temporarily absent, when albumin is permanently absent or late in resolving inflammatory processes after chemic tests prove the final absence of albumin. Casts should be searched for, even when albumin is absent, although many of us are too prone to examine the sediment of non-albuminous urine with predetermined negative results. Our conceptions have been broadened concerning the significance of hyaline casts, now regarded as occurring in urine otherwise apparently normal, although Senator considers that all casts are formed in the kidney and always indicate some renal disease. Granular and epithelial casts probably always point to degenerative or inflammatory lesions.

We are forced to ask ourselves whether casts always indicate nephritis—i. e., whether finding casts without albumin is adequate proof of nephritis. Zimmermann, Key[24], Griesinger, Meyer[25], Rosenstein[26], Vogel, Thomas[27], Senator[28], Burkart[29], Fischl[30], Bartels[31], Nothnagel[32], etc., have exceptionally observed cylindruria without albuminuria. When Steinbeck constructed the centrifuge, Leyden and Glaser found hyaline casts in the urine of healthy individuals. Radomyski[35] examined cases of valvular heart disease, arterio-sclerosis, gastro-intestinal inflammation, pulmonary tuberculosis, acute infectious diseases, carcinoma, cachexia, nervous diseases, and healthy individuals, and found casts in a very great number, explained by him as the result of circulatory disturbance. Daiber[36] found hyaline and granular casts without albumin, especially in circulatory and amyloid disease. Alber[37] reported granular, hyaline and epithelial casts and red blood-disks without albuminuria. Kossler[38] reports hyaline, granular, epithelial, waxy, and corpuscular casts in many infectious and other conditions without coincident nephritis or albuminuria. The specimens microscopically showed only degenerative changes, but no

inflammatory insignia. In his observations nucleo-albuminuria and cylindruria, occurred together, whence he distinguishes two types of cylindruria, (a) degenerative and (b) inflammatory. He has observed in scarlatina, as had Baginsky in diphtheria, febrile albuminuria, followed by cylindruria with nucleo-albuminuria and, finally, by nephritis with albuminuria. Casts without albuminuria are, in my experience at least, very common. They are every day occurrences after surgical operations and are very frequent in toxemic conditions, even in seemingly mild infections. Regarding absence of casts, Sehrwald[16] noted disappearance of casts without that of albumin. He described in urine containing but few casts many granular masses and free nuclei, while the cylinders became paler and more delicate. Casts, he maintains, may be dissolved in urine, not from chemic causes nor from decomposition alone, but from the presence of pepsin in acid urine, the action of the pepsin being increased by the urine remaining long in the bladder or by high temperature. The dissolution of casts may occur even in the kidney itself. He recommends examination of freshly-catheterized specimens, not long excreted into the bladder before withdrawal.

As a cardinal diagnostic point with retinitis, albuminuria, and the urinary findings, we consider those cardio-vascular alterations which, frequent in the interstitial, are at least inconstant in the parenchymatous types. Heart and arterial changes are by no means invariable, even in contracted kidney. Cardiac hypertrophy may be simple, as in primary contracted kidney, or eccentric, as in other forms of contracted kidney. There may be dilatation without hypertrophy, or, indeed, even myocardial atrophy is found, as observed in several recent cases. The circulatory changes may be otherwise explained—e.g., from arterio-sclerosis of different etiology.

Senator states that he who invariably examines the urine and heart in every instance rarely fails to diagnosticate nephritis. This very interdependence of cardiac and renal physiology and pathology, usually of diagnostic aid, may prove a source of clinical confusion. Thus primary cardiac disease may cause renal congestion, embolism, or even acute or chronic nephritis. Again, alcohol or syphilis may be a common cause for an arterio-sclerosis, myocarditis, and nephritis, diseases as subordinate to the causal factor as possibly independent of each other. Finally, the heart lesion may be wholly secondary to renal disease. While simple renal stasis is usually differentiated with ease by considering the sediment, the absence of inflammatory insignia, and the parallelism between urinary findings and cardiac activity

(whence the diagnostic value of such cardiants as digitalis and strychnine), yet in the terminal stadia with cardiac weakness, extensive hydrops, dyspnea, râles, or systolic murmur, it may be difficult or impossible to differentiate between myocarditis with renal stasis and renal disease with ultimate cardiac asystole, although gallop-rhythm is more common in the heart of renal disease than in primary cardiac affections. Cardiac hypertrophy is more quickly detected clinically than pathologically, especially in the young, because the urine is increased early before the physical signs of hypertrophy prevail, and again because hypertrophy obtains long before dilatation appears. Emphysema may cover the precordial evidences of hypertrophy, so that the clinician is thrown on the evidences of hypertrophy presented by the pulse or upon other manifestations of increased arterial tension, as epistaxis, vertigo, headache, tinnitus, palpitation or cardiac asthma, etc. While hypertrophy is looked for in interstitial rather than in parenchymatous nephritis, we must never forget that the two types often mingle with e. g., the urinary findings of a large white kidney and the cardiovascular findings of a renal contraction.

A word as to *edema*, usually absent in interstitial nephritis save where the heart fails in the last stages and usually present in parenchymatous disease; it is due to inflammation or undue permeability of the blood vessels, referable to malnutrition as is the anemia. It is difficult to understand why some cases escape edema and others find it their chief complaint, even as in valvular disease, some subjects die with massive anasarca and others with no sign of stasis. In rare cases it may be present without albuminuria.

The diagnosis of typical nephritis or of latent, atypical, non-albuminuric nephritis, important in itself, becomes more difficult and important when nephritis is associated with other diseases. In the logical process incident to the diagnosis of frank nephritis, we ask ourselves, Is the nephritis the sole lesion? Many errors are made in the interpretation of this question, although the observative element in our process may be absolutely correct. Finding a patient with undoubted nephritis we ask, Where does said nephritis stand? What is its exact dignity? Is its cause hidden? Is it primary? Is it somewhat of an accidental finding? At this point the most delicate analysis is demanded if we would diagnosticate correctly. It is frequently most difficult, or actually impossible, without several early, careful observations of a case, to decide upon the first examination whether for example a chronic nephritis is the cause of a pericarditis, pleuritis, or pneumonia, since nephritis in lessening physiological resistance is

frequently complicated by these highly characteristic, secondary, or it may be, terminal infections. Conversely, a tubercular pleurisy, a pulmonary tuberculosis, or a genuine lobar pneumonia is capable of exciting secondary nephritis. In the two possibilities cited it is not always easy to separate an acute from a chronic nephritis, whence the diagnosis with the parallel prognosis may depend solely upon the chronological test, the clinical evolution of the disease. Most of us can recall from hospital and private practice instances of skull fracture, miliary tuberculosis, leptomeningitis, or cerebral abscess, sepsis, and other diseases, falsely diagnosticated uremia, simply because nephritis was also present. Senator[1] has said, doubtless from personal diagnostic errors, that without previous history we can often only diagnosticate a renal disease and suspect other latent affections. The danger of mistaking uremic symptoms, as hemicrania, nervous symptoms, dysentery, etc., for independent disease must be greater in direct ratio to difficulty of diagnosis of the nephritis itself. One of the main objects of the paper is to emphasize certain anomalous types of both acute and chronic nephritis and personal diagnostic errors in their study. Many authors, as Tyson[2], have remarked upon the lack of correspondence between the clinical and pathological findings in nephritis. Semmola[3] holds that clinicians err in considering albumin in the urine the measure of nephritis. Cantharidin produces an intense nephritis, attended, however, by very slight albuminuria, while mercurials produce slight parenchymatous changes with copious albuminuria. I have sometimes felt inclined to state that in some forms of nephritis the less the urinary symptoms, the greater are the pathological findings. This lack of parallelism of findings in the living and in the dead subject sometimes leads to the most interesting discussion between the clinician and the pathologist who, by the way, is not always correct when the question turns on interpretation of the symptoms before death. I am convinced we find nephritis at autopsy in 25 to 33 per cent. of cases of various independent diseases which do not show it during life and the nephritis may have nothing to do with the fatal issue.

Few authors record acute nephritis *sine albuminuria*. Lecorché[11] and Talamon have never observed the combination. Qurirolo[4] described a case of post-scarlatinal nephritis unattended by albuminuria. In speaking of the general difficulty of diagnosticating nephritis when no albumin is found, he remarks that not only edema, but also uremia and death occur with wholly negative urinary findings. In his case nephritis was determined at autopsy. Intra vitam, the urine was free

from albumin; the amount, the specific gravity, and percentage of urea were satisfactory. Dickinson[5] mentions that casts may be absent in what he designates acute interstitial nephritis, though much albumin be present. Bartels[6] never observed nephritis without albuminuria in acute parenchymatous nephritis, although in cases of acute scarlatinal nephritis without autopsy he suspected the condition, but could not demonstrate it. Henoch[7] saw marked acute non-albuminuric parenchymatous nephritis with casts toward the end of life, and in a second case albumin, present at first, later wholly disappeared. Fermi observed a scarlatina epidemic in which nephritis prevailed without albuminuria. We must remember that anasarca complicating scarlatina does not necessarily prove the existence of nephritis. Bartels found casts constantly in acute nephritis. He cautions against interpreting as nephritis the albuminuria occurring in severe infectious disease, even though accompanied by hyaline casts. Blood or blood-casts should also be present to confirm the diagnosis. Rosenstein[8] possibly hints at the danger in overlooking acute nephritis when he remarks that disappearance of albumin in acute nephritis is no proof that the process has ended, since blood and casts may persist and indicate that the inflammation still lives. Rosenstein has seen blood and casts appear in scarlatinal nephritis before albumin could be detected. Senator[9] regards albumin as constantly present in acute parenchymatous nephritis. Leube[10] has never observed its absence in acute nephritis, although he speaks of alleged instances in literature. Sanné found albumin absent thirty times in one hundred and twenty-four cases of scarlatinal dropsy. I attempt to evade discussion of the various types of nephritis, as the secondary contracted kidney, the primary or genuine contracted kidney, the chronic hemorrhagic parenchymatous form, etc. They are met at times in their typical garb but very often masquerade, and the more one compares the clinical minutiæ as regarding the microscopic analysis, the arteries, heart, edema, etc., etc., with the post mortem findings, the more is he inclined to be satisfied with a diagnosis of *chronic diffuse nephritis* with involvement more or less of the heart, blood vessels, connective tissue, etc.

The following case was observed in my service in Cook County Hospital, July 26, 1895, to August 30, 1895:

P. F., No. 143,474. Swede, aged twenty-six years, single. Family history quite negative, one brother having died at twenty-three years with pulmonary tuberculosis. Personal history: Lived in Chicago seven years; drinks beer occasionally; uses no whisky; smokes. Previous disease includes only poorly-remembered diseases of childhood. Present affliction began three weeks before admission, with

anorexia, slight diarrhœa, weakness, fever. No headaches, vomiting, epistaxis.

Examination: Apathetic. Dichrotic pulse. Rose spots. Splenic tumor. Slight diarrhea, with characteristic typhoid stools. Slight cough. Pulse 70 to 88 or 90. Temperature 102-104° F., with solution by lysis. Respiration 24. Urine 1175 c.c., acid, amber, specific gravity 1022; no albumin, no sugar, no casts. The diagnosis was typhoid, and the treatment was fluid diet, sponging, salol and calomel. Four days after admission the eyelids became edematous. The urine showed no albumin. The anasarca becoming very pronounced and notable on the chest, ankles, and face, the urine was again examined from a twenty-four hour specimen, with the following result: 1100 c.c.; acid; no reaction to nitric acid, picric acid, or ferrocyanide tests for albumin; specific gravity 1016; microscopically a small number of red disks, many granular and epithelial casts. The diagnosis of intercurrent acute nephritis in the course of typhoid was inevitable, despite the lack of albumin. Tests were carefully made with the same results again on August 1st, and every other day until his discharge on August 30, 1895, the amount of urine remaining practically the same, specific gravity varying from 1014 to 1016 or 1018. Granular, epithelial, and once several fatty epithelial casts were found. At the time of discharge the casts, so numerous at first, had all but disappeared, an occasional granular cast being found only after examination of several slides. Fortunately, anatomical confirmation of the diagnosis was lacking.

A second case, an acute exacerbation of a chronic nephritis, was seen with Dr. B. Van Hoosen.

Previous history was chiefly of repeated attacks of erysipelas covering a period of at least six years. The patient was extremely nervous, and had suffered from weak stomach and capricious appetite. The patient, when first seen, was suffering from recurrent erysipelas, which, nearly healing in one locality, broke out again anew in contiguous areas and covered repeatedly the face, trunk, and extremities. Nausea was a prominent symptom. There were no suggestive cardiovascular findings. The temperature was but little above normal; the pulse tended to rise with exertion. An emphysema, with the usual findings, existed. Nephritis was suspected, but two examinations showed no albumin, no casts, no decrease in total solids, specific gravity nor quantity. A third specimen gave the least clouding with picric acid; the fourth gave no albumin, but a few hyaline casts, with some blood cells, were detected in the centrifuged sediment. The albumin and casts disappeared, but the general condition became much worse, and in about two weeks after the first examination cardiac dilatation with a tachycardia of 130-160 intervened. Cardiac stimulation of enormous amounts of digitalis, morphine, nourishing enemata, infusions of salt solution, whisky, strychnine, ammonia were unavailing. Just before death considerable blood appeared in the urine. The probable ante-mortem diagnosis was nephritis (acute upon chron-

ic), cardiac dilatation, and recurrent erysipelas. The autopsy, at which Drs. F. X. Walls, B. Van Hoosen, and R. Hickey-Carr were present, revealed very slight arterio-sclerosis, marked pulmonary emphysema, bronchial catarrh and stasis, hepatic congestion, fatty degeneration, and focal microscopic induration and round-cell infiltration, induration of spleen and dilated heart. The kidneys were deeply congested, and, while not weighed, measured about 2-4 cm. more than normal in every direction. The capsule was not universally adherent, but tore the renal parenchyma here and there over a considerable area in both kidneys. The cortical markings were obscured, and here, as in the medulla, deep-red streaks alternated with yellow to gray bands. Dr. Walls, Director of the Pathological Laboratory in Northwestern University Medical School, kindly examined microscopically all of the viscera, and found the following changes in the kidneys:

The sections are very diffusely congested. The capsule is thickened and infiltrated with small round cells. Immediately beneath the capsule in the cortex of the kidney are many areas of dense round-cell infiltration which are distinctly perivascular, varying in size from small foci to large wedge-shaped areas about one-fiftieth inch in diameter, with apices directed outward. In the larger areas compressed, degenerated foci are observed, together with atrophied tubules and occasional fibrous glomeruli. The cortex is the seat of advanced parenchymatous change. Little change is observed in the connective tissue, only occasional spots of perivascular round-cell infiltration being seen. Most of the glomeruli are large, with congested tufts and slightly increased connective tissue. Some of the cells of Bowman's capsule are swollen and desquamated. The convoluted tubules are distended, the lumen large, filled with amorphous, granular material. The epithelial cells are large, coarsely granular, with faint or absent nuclei, often desquamated. Here and there the tubules are filled with red blood cells. The tubules are relatively intact in the medullary part, although filled with red disks and casts. The large blood vessels show slight intimal induration and increased fibrous tissue in the muscular coat.

Whether we interpret the pathological findings as those of acute parenchymatous nephritis, or as an acute exacerbation of a chronic nephritis, they are equally to the point. In either instance hyaline casts found once, and a mere trace of albumin, correspond clinically equally well, or indeed better, with parenchymatous degeneration than with acute nephritis of the intensity observed microscopically in the case quoted. I expected to find a chronic interstitial change rather than parenchymatous inflammation.

Rayer[11] was probably the first to remark the disappearance of albuminuria in the course of chronic Bright's disease. Many authors have since noted examples of profound renal lesions without albuminuria during life. Albumin may be absent even in amyloid nephritis.

Mahomed states that absence of albumin is almost the rule in the contracted red kidney. Lecorché and Talmon[12] believe that albumin is rarely constant, and that tests of several specimens must be made with delicate and various reagents. They quote an instance of saturnine nephritis in which albumin disappeared when the glomeruli became fibrous and their secreting function was suppressed. Burrows described similar cases. Roberts[13] relates a case of post-scarlatinal parenchymatous nephritis in which the urine for four months prior to death contained no albumin, blood or casts. Autopsy revealed a large white kidney. Roberts remarked that the anatomical findings could not be questioned. Lecorché believes that latent nephritis is but nephritis observed in periods of remission or complete compensation. Lecorché and Talamon, after stating the well-known fact that the percentage of albumin is not proportionate to the severity of the renal lesion, describe death occurring from cerebral hemorrhage, cardiac arrest, or intercurrent disease while the urine is quite negative. Necropsy shows contracted kidneys, and the absence of albumin is explained by the fact that the diseased glomeruli become fibrous and impermeable; hence only the sound glomeruli secrete urine, which is therefore free of albumin. Lancereaux[14] observed fatal saturnine nephritis unattended by albuminuria. Ackermann described a case of chronic parenchymatous nephritis in which, during the last thirteen weeks of life, renal casts were absent. The necropsy explained their absence, since in the pelvis of the kidney there was a mass of casts weighing eight grammes. Eichhorst noticed the absence of albumin from the urine for weeks and months at a time, so that the patient may even be considered well until a fresh setback occurs. Leube cannot confirm statements that albuminuria can be entirely wanting in chronic (interstitial) nephritis, while Rosenstein states that albuminuria, though important, is not indispensable, and that we should always examine for casts, since they may occur without albuminuria. Senator maintains that albumin is constant in chronic diffuse non-indurative nephritis, and that cases of alleged interstitial nephritis with wholly non-albuminous urine are but instances of arterio-sclerotic induration. Dieulafoy's experience includes four cases in which the uremia of interstitial nephritis was unattended for seven months to a year by any albuminuria. Delafield[15], under the title of "Chronic Productive Nephritis without Exudation," writes that the urine is without albumin or casts or with albumin and very few casts. Bartels states that the chemic analysis shows constant albuminuria in chronic parenchymatous nephritis, which never fails during the entire clinical

course. The same author holds that it is not constant in interstitial types, and observed a single instance in which albuminuria was constantly absent. Tüngel has often found it absent in chronic interstitial nephritis.

Case III. *Acute diffuse parenchymatous nephritis.* W. A. W., St. Luke's Hospital, October 25 to November 4, 1896. History written by Dr. Thomas H. Lewis. A book-keeper, English nativity, aged thirty-five years, married. Complains of pain in back, chest and legs. On September 26, 1896, present illness began with dull pain extending from throat to epigastrium, and with pain in the lumbar region. Marked dyspnea and palpitation existed. There was pain over the lower lobe of the left lung. Great thirst, anorexia, constipation. After treatment outside of hospital, pain disappeared and dyspnea ceased; but two weeks later, after sleeping near an open window, his joints became swollen, the left knee being especially painful.

Previous illness: Usual diseases of childhood. At seven, rheumatism. In 1890 stomach trouble from which patient lost seventy-five pounds. The thyroid gland became swollen, his pulse rapid, and marked exophthalmos developed. No history of venereal disease.

Family history. Maternal grandfather died of gout. Otherwise negative.

Personal history. At present uses tobacco and liquor moderately, although formerly drank whisky in large amounts.

Physical examination. General nutrition fair. Mucous membranes normal. Considerable exophthalmos, with von Graefe's sign. Tongue slightly coated. Lungs negative. Dilatation of left ventricle, apex being finger-breadth's beyond the nipple-line. During the last two days of life, a short, superficial, rather rough systolic murmur was heard during complete expiration. The pulse was uniformly rapid, from 110 to 120. Respiration 38 to 44. Temperature-curve ranging from 101.6 to 103.8° F., fairly though not absolutely continuous. The thyroid was not enlarged. Abdomen negative, no tympany, rather sunken in contrast with the well-formed thorax. No splenic tumor; liver, normal outlines. The knee-joints were swollen, painful, with distinct floating of the patella. Pain without swelling in right shoulder and left wrist. No edema. The patient complained of precordial pain. Alkalies and salicylates, and finally, potassium iodide in full doses relieved neither the pain nor the swelling. The bowels moved freely after administration of calomel; stools were dark in color. Considerable pharyngeal pain and hyperemia on the ninth day; appropriately treated. At the same time the pulse rose to 150, and dyspnea, with cyanosis, was marked: combated with strychnine, digitalis, camphor and whisky. Death from cardiac exhaustion on the eleventh day after entrance. Urinalysis—acid, 1018 to 1028, darkish color, no albumin, no sugar, urea 2 per cent., amount thirty to forty ounces, although bowels were constantly relaxed; microscopic examination showed stray pus-cells.

The diagnosis was uncertain for a long time. The patient had exophthalmic goitre, which might have explained many of the findings, yet certainly not the temperature, angina, and articular signs. Typhoid fever was excluded by the absence of roseolæ, splenic tumor, tympany, character of the stools, absence of delirium, etc. A rapid pulse in a goitrous subject would not exclude complicating typhoid. Miliary tuberculosis was considered, favored by the cyanosis, dyspnea, and increased respirations, perhaps, but still the circulatory failure, articular swellings, angina, argued against it. Sepsis cryptogenetica best explained the course and findings, the angina, synovitis, etc. Ulcerative endocarditis was considered, but rejected. The urine was searched chemically and microscopically with great care for possible evidence corroborative of sepsis in the form of nephritis, but repeated examinations were negative.

Autopsy, November 6, 1896. Pleuræ practically negative, except many ecchymoses. Pericardium-cavity obliterated almost completely by old adhesions and by fresh exudate at the apex, mostly fibrinous, but partly sero-sanguineous. Stripping off the fresh exudate, the visceral and parietal leaves of the pericardium showed hemorrhagic areas. The valves were practically normal. The ventricles were dilated and hypertrophied, the right being 6 mm. and the left 15 mm. thick. The lungs showed a few hemorrhagic infarcts, pulmonary edema, hypostatic congestion, and a few areas of lobular pneumonia. Hemorrhages were found in the renal pelvic mucosa, in the pancreas, and in the articular synovial membranes. The liver was slightly enlarged, fattily degenerated, and somewhat congested. The kidneys were very large; unfortunately, they could not be weighed; the capsule stripped readily, showing subcapsular ecchymoses. The cortex was swollen and its markings were very indistinct. The organs were the seat of cloudy swelling, and were, like other parts, considerably congested. Several white infarcts existed. As the macroscopic renal findings were a surprise, special attention was given to the microscopic examination. In the cortex were areas in which exudation of white cells was sufficient to obscure the field; less exudation existed in the medulla. The glomeruli were not greatly altered, there being some congestion, some exudation, and considerable deformity by thickening of the capsule. The epithelial cells lining the large and small tubules were universally degenerated, disintegrated, and desquamated, the cells without nuclei contrasting sharply with the deeply-stained extravasated leucocytes. No essential nor systematic increase in connective tissue, except in quite a number of the glomeruli. Undue vascularity existed, together with pouring out of the hemocytes into the desquamated uriniferous tubules.

Diagnosis. An acute diffuse parenchymatous nephritis, with possibly more ancient changes of distinctly minor significance.

Stewart[17] justly remarks that when albumin is not found, the later search for casts is at best perfunctory. Said search must be conducted carefully with the aid of a centrifuge, with a low lens and

properly graduated illumination. He believes that albumin may be constantly absent throughout the course of chronic nephritis, and casts be detected only after much search. He frankly states the conviction, which we also feel regarding our own experience, that he has overlooked many cases of nephritis without albuminuria. Wilkes[18] has pointed out that granular or cirrhotic kidney may not be evidenced by albuminuria, Stewart admitting that the form described is not a true nephritis. As Stewart states, Osler, Fagge, v. Jaksch, and others mention the subject briefly, if at all. Millard[19] and Mahomed[20] speak of the absence of albuminuria, but refer chiefly to granular kidney or the typical arterio-capillary fibroid kidney of Gull. In the cases reported by Mahomed, the kidneys belonged to the second stage of his classification, the first being functional renal inadequacy, without renal or circulatory alteration, the second chronic Bright's disease without nephritis (red granular kidney, arterio-capillary fibroid kidney), and the third chronic Bright's disease with nephritis (mixed or mottled granular kidney), where epithelial changes exist and diagnosis is easy. Stewart's estimation of Mahomed's view as extreme is just. It seems that Mahomed has, in instances at least, confused cause and effect, and that arterio-sclerosis is forced to explain too much.

Case I. of Stewart was nephritis without albuminuria, but with hyaline and granular casts found once. Of his seven cases one came to autopsy, which revealed granular kidneys and hypertrophied heart, although the casts and albumin seem to have been absent throughout its course. Stewart holds that several of his cases do not correspond to the fibroid kidney, the one form in which albumin may be persistently absent. Epithelial changes were present, proven from the finding of hyaline, granular, and waxy casts.

He tabulates the differences between what we may term his type of nephritis and the parenchymatous and interstitial forms as follows:

Chronic Parenchymatous Nephritis.	Chronic Interstitial Nephritis.	Form of Chronic Non-Albuminuric Nephritis Closely Resembling Neither.
Urine always albuminous; scanty in amount except during secondary atrophy, then may be abundant; light colored, depositing urates readily. Specific gravity normal or lighter than normal, though low for amount passed.	Urine not constantly albuminous; usually to degree recognizable by Heller's test. Urine profuse unless cardiac failure, with dropsy, etc.; light colored, low gravity, slight sediment, often invisible.	If urine is ever albuminous, it is probably not as an incident of the malady, as the most decided symptoms of renal inadequacy may be present, or, indeed, uremia with persistent absence of albumin; urine subnormal in amount, quite scanty, high colored, without cardiac weakness and dropsy, with high blood-pressure; gravity lower or higher than normal, though relatively low considering the amount.
Casts numerous, great variety, epithelial, granular, hyaline, waxy; blood corpuscles, and connective tissue; shreds not infrequent. Microscopically urates and phosphates predominate; oxalates less common.	Casts not frequent, usually hyaline, less often granular. Renal epithelium and blood-cells scanty or absent; oxalates common.	Casts common, but not numerous, principally hyaline, but granular, present in all, though in less number; epithelial casts are rare (seen in very small number in two cases); waxy casts in one case; cylindroids in all, in several very numerous; renal epithelium in all; oxalates very common: urates often in relative excess; occasionally blood and pus cells.
Urea usually much diminished, uric acid practically normal.	Total solids often normal; urea may be normal, usually diminished; uric acid is usually diminished.	Total solids, urea and mineral salts, always diminished in amount; uric acid normal or diminished.
Cardiac hypertrophy not invariable, though tendency to increased blood pressure. Atheroma not common in early stages.	Hypertrophy usual; blood-pressure raised; fibrosis almost invariable and pronounced.	Hypertrophy not detected, although in all first sound forcible, second aortic accentuated; blood-pressure raised in five (out of seven); not detectable in two while on non-nitrogenous diet; no arterio-sclerosis in any.
Uremic symptoms common, although less than in interstitial; no loin pain.	Uremia common; no loin pain.	Uremic signs common; loin pain usual.
Dropsy usual; obstinate.	No dropsy, and even edema not often detectable till disease advanced.	No dropsy; edema not common.
Occurs mostly after age of forty. Patient pale and waxy looking.	Mostly after forty (degenerative period); for a long time only failure of nutrition noted; grayish complexion.	Three cases under thirty, others middle aged; no degenerative process; facies pale; no marked anemia.

Stewart comments upon the dissociation of casts and albumin in his series of cases, casts being more or less constantly present, while albumin was usually absent. Probably casts are due "rather to faulty metabolism or inflammatory irritation of the renal epithelium than to exudation of serum."[21]

Charles W. Purdy,[22] of Chicago, wrote an exhaustive article upon the "Pre-albuminuric Stage of Chronic Nephritis," in which, however, his stress was laid particularly, as his title hints, upon the absence of albuminuria in the formative stages of the disease, quoting Burrows, Christison, Rayer, Reed, Malmsten, Grainger, Stewart, and Roberts.

Graves and Monneret have noted nephritis without albuminuria, as have also Hue, Huchard, Millard, Guesdon, Dolespierre, Gand Delalande, Diculafoy, de Coquet, and others already cited.[23]

Ordinary care in examination of cases during the stages of development and progression usually establishes the diagnosis and the relation of the urinary to the somatic findings and other symptoms. Meeting a case in the terminal stage, one may encounter more difficulty and may hesitate whether to diagnosticate e. g. uremia or some organic nervous disease or possibly both in conjunction.

The typical uremic complex of nervous and digestive manifestations is too well known to demand detailed repetition. Sufficient is the mere mention of (1) the *nervous group,* anxiety, unrest, headache, neuralgias, delirium, the various uremic "equivalents," convulsions or coma, mydriasis in acute or myosis in chronic uremia, etc.; (2) the *digestive group,* nausea, vomiting, epigastric oppression, diarrhea, etc., and (3) symptoms, as uremic asthma, etc., largely due to cardiac incompetence or to secondary (maybe terminal) complications.

Uremia is usually readily differentiated from organic cerebral disease, yet confusion may occur in atypical cases. Leube's [24] chief rule in the diagnosis of uremia is formulated as follows: in patients with nephritis, uremic intoxication is to be assumed as the cause for nervous symptoms *only when other causes may be excluded*—a method of diagnosis by exclusion. He considers this method important, since in the course of renal disease occasional organic lesions in the central nervous system, such as hemorrhage and meningitis may simulate uremia. The clinical diagnosis in such cases is often made with a certain degree of probability.

To repeat some of the earlier statements of this paper, preeminent importance attaches to the presence of albumin, casts and to the amount of urine. With typical nephritic findings in the urine,

the diagnosis of uremia is usually easy. Exceptions exist in that nephritis may be unattended by albuminuria,[40] casts may be permanently absent (Ackermann) and uremia may intervene when the amount of urine and urea is normal (Christison). I have had under observation for over three years a case of chronic parenchymatous nephritis in which every variety of cast—hyalin, granular, epithelial—is constantly present while albumin is absent for months consecutively. Liebermeister[76] instances a case in which immediately before an uremic seizure both urine and urea were increased twofold. To offset this case, Biermer[77] reports an instance of anuria for two hundred and twenty-two hours before uremia appeared. Albumin alone is no proof of uremia as it may occur in nervous lesions, meningitis, hemorrhage, epilepsy, tetanus, etc. According to Fleischer, uremia being due to cerebral anemia, we must guard against confusion with cerebral anemia from other causes, since lowered arterial pressure may cause both cerebral anemia and albuminous urine. Such albuminuria is transitory and unaccompanied by casts.

When conspicuous cardio-vascular symptoms attend nephritis, they become valuable diagnostic adjuvants, worthy of considerable but not implicit confidence. Case 3 exemplifies this point (latent meningitis with albuminous urine and cardiac and vascular alteration v. i). Cardiac hypertrophy predisposes to apoplexy, hemorrhages and inflammations in various viscera, especially in the retina. Cortical irritation increases arterial tension.[48] Moderate arterial tension increases the cardiac force while excessive tension decreases it. Redundant toxins paralyze the vasomotor system, and the heart's strength flags by the absence of that difference in arterial tension imperative for the maintenance of the circulation. Hence the multiplicity of cardiac conditions conceivable in uremia.[44] The pulse is slow (40 to 60) before an attack of uremia (Thomas, Rosenstein and Wagner) and later (after convulsions) it is usually rapid. I have seen cases of uremia with such prodromal slowing of the pulse that my attention was specially directed to the possibility of brain hemorrhage, of severe myocarditis or of digitalis poisoning, in which however the autopsies disclosed nephritis alone. Early in meningitis which may simulate uremia, the pulse is slow, later frequent.

Most important are the ophthalmoscopic findings, for retinitis albuminurica is rarely absent in chronic nephritis leading to uremia (Leube) and in acute uremia the abundant albumin, casts and edema are sufficiently suggestive. In meningitis the pupils are mostly narrow, and in uremia dilated, yet myosis is observed in chronic uremia.

Leube does not hesitate to admit that in certain cases the diagnosis of meningitis is for him more difficult than that of any other cerebral lesion, because the clinical complexus of symptoms varies and certain signs of meningitis occur in other intracranial diseases. Uremia and meningitis have many symptoms in common—headache, vertigo, convulsions, vomiting, delirium, coma and irregular breathing. Confusion is especially probable when the convulsions are localized in a few muscles, where partial contractures, focal paralyses and temperature occur. Leube remarks that in such cases the most experienced diagnostician may err. Meningitis and uremia may coexist, yet meningitis is the least frequent of all the forms of serositis to which the uremic patient is exposed."[4] Broadly speaking, circumscript convulsions and paralyses speak strongly for anatomic changes in the central nervous system, especially when constant, although such alterations occur rarely in uremia. In uremia they are chiefly fugitive. Literally speaking, I know of no focal nor general symptom or sign observed in meningitis which has not been recorded singly or combined in uremia.

A synopsis of obscure cases observed by others and several of my own are in place because of meager mention of the subject in literature. Jolly and Guinon[13] admit possible errors betwen uremia and meningitis. Desnos[14] reports a case in which the patient during sound sleep was suddenly seized with dyspnea, vomiting, coma, and the urine contained much albumin. On autopsy the kidneys were normal, but there was a hemorrhage the size of a nut in the pons varolii, breaking into the fourth ventricle.

Rosenstein remarks that diagnosis is nearly impossible when motor and sensory disturbances occur synchronously with nephritis, which are due, however, not to urinary retention but to a palpable disease, e. g., suppurative meningitis. He cites a case: urine 1009, much albumin, red and white blood cells, casts, fat, granules, headache, dilated heart, coma; temperature 39.4 degrees C., wide pupils; no paralyses; slight twitching of arms. Autopsy disclosed nephritis plus suppurative basal meningitis.

Murchison has described cases of uremia closely resembling meningitis, presenting rigid necks, convulsions and coma, but Gowers remarks that the temperature is normal in uremia (v. i.).

Rosenstein's experience includes a case of uremia with edema but without urinary findings presenting a typhoid appearance; post-mortem disclosed nephritis.

Stenhouse Kirkes[75] drew attention to the fact that not all cerebral symptoms in nephritis are functional but that some are of organic origin, e. g., apoplexy. Thus uncomplicated aphasia[77] was found due to hemorrhage in Broca's convolution.

In meningitis, the breathing is frequently sighing, irregular and of the Cheyne-Stokes type. In uremia, asthmatic attacks, angina pectoris vasomotoria,[41] a laryngeal croup type, Cheyne-Stokes[45] breathing and cyanosis are recorded.

The subject of temperature in uremia is a mooted point. Many maintain it is reduced (Kier, Roberts, Hirtz, Billroth, Thaon, Hutchinson, Bowmeville, Budin, Hanot, Lacombe, Behier, Liouville). Netter observed the temperature fall as low as 30 degrees C. Others note a rise (Tarnier, Torday, Hippolite, Chauffard, Tenneson, Chantemesse). Lépine[45] found that the temperature may rise without convulsions or inflammations, explicable by vasomotor irritation and decreased heat elimination. Landois produced a rise of temperature by irritation of the cerebral cortex, caused by vasomotor constriction. Unusually low temperature is found when the vasomotors are paralyzed and effete products accumulate in the system. Strümpell[46] observed not uncommonly a temperature rising to 39 degrees C., irregular in type, rarely reaching 41.5 degrees and often associated with chills, vertigo, sweating, headache, and tinnitus aurium. Rosenstein[47] expects low temperature only in constitutions depleted by diarrhea and vomiting. Bartels, Guyot, d'A. Robert, Dumont and others confirm Rosenstein's position, although most authorities oppose his views. We have seen cases in which, e. g., typhoid was thought of from the constant evenly high temperature where the autopsy disclosed nephritis and in two cases with no bacteriologic evidence of any secondary or terminal infection.

The most concise general statement regarding uremic nervous phenomena asserts that: 1, *paralysis* affects especially the sensorium, to a lesser degree the special senses and rarely motility; 2, *irritation* seldom selects the sensorium (e. g., delirium), it mostly engages the motor paths (convulsions) and never implicates the special senses.

Uremic convulsions are tonic or clonic. Described usually as general, they may, by unusual localization, resemble focal symptoms. Thus Rosenstein,[47] Strümpell[54] and Bartels[55] found convulsions only on half the body, one-half the tongue and in the left arm and leg, with deviation of the head to the left. They have occurred with convergent strabismus,[78], [80], facial spasm like tic convulsif (Lasègue and G. Sée), delirium, etc. Convulsions have simulated epilepsy or Jacksonian

epilepsy. Nystagmus,[82] localized trembling and twitchings are recorded,[79], [80], [81], [83]. Twitchings are easily overlooked before and after coma (Traube[85]). Grinding of the teeth, frequently observed in meningitis, also occurs in uremia (Strümpell and Bourdillat[84]). Although tonic convulsions rarely complicate uremia, yet a tetanic type is recognized. The cases of Thomas, Weiss, d'Aran, de Hausser, Rauth and Jaccoud exhibited trismus. Aorard relates a case in which convulsions on one side and contractures on the other were combined. Jaccoud[48] places on record three cases of spasmodic contractures of the forearm and cervico-dorsal flexors, producing opisthotonos. Convulsions and contractures have coincided upon one side of the body and a case of flaccid hemiplegia was transformed by uremia into hemiplegia with convulsions and contractures (Raymond).

Rigidity of the neck, rarely absent in meningitis, can not be excluded from the symptomatology of uremia (cases of Jaccoud[49] Kussmaul,[50] Rose,[51] Weiss,[52] Cohen[53] and Thomas). The hands, usually free in tetanus, are involved in uremia. Retraction of the head, however, is also caused by rheumatism[86], diseases in the medulla, aneurysms of the vertebral artery, brain tumors in the posterior fossa, peripheral irritation, tender cervical glands, and abdominal disturbances.[42]

Paralyses in uremias are infrequent, so that Lesègue, Lecorché and Talamon deny their existence. They are chiefly transitory hemiplegias. The causes assigned are cerebral edema, capillary hemorrhage, softening, apoplexy, inflammatory foci or cortical overstimulation by toxins. Some instances of hemiplegia are the following: cases of Fuchs,[57] Baginsky,[58] Addy[60] (with aphasia, amnesia and deafness), Paetsch,[60] Churchille,[61] Imbert-Gourbeyre,[62] Rego[63] (with aphasia), Lequimas,[66] Raymond,[67] Charpentier,[68] Thomas,[43] Blackhall, Leichtenstern, Simpson, Townsend, Rosenstein, Chauffard and Mutenesse. Paraplegia seems to have occurred but twice[64], [65]. Jaeckel in four hemiplegias found facial paralysis twice and one crossed oculo-motor paralysis, with no post-mortem lesion except cerebral edema. Other combinations are: aphasia with facial paralysis (Dieulafoy[70]), glossoplegia[71], [72], neuralgia, myosis, spastic condition of arm, conjugate deviation of the eyes, right facial paralysis and right hemiplegia.[69] Dunin's[43] cases exhibited the following focal symptoms: case 1, unilateral spasms; 2, unilateral spasms plus aphasia; 3, aphasia, both internal recti paralyzed, nystagmus and diplopia.

The following histories illustrate the difficulties met in equivocal cases:

Case 1. Woman, aged 40; delirious; rapid pulse, 90 to 120; fairly continuous temperature, ranging betwen 101.9 to 102.6°; dry tongue, brownish coating; glazed pharynx, respiration 30; diffuse bilateral moist mucous râles with hypostasis over lower lobes behind and at base; pulse not essentially tense; second aortic tone slightly accentuated, but arteries are somewhat tortuous and rigid. The urine is ammoniacal, 1015, albuminous but contains considerable pus and micrococci but no casts, warranting a diagnosis of cystitis; the amount can not be collected because of involuntary evacuations. There is divergent strabismus due to paralysis of the left internal rectus; there is ptosis on the left side and complete right hemiplegia, except the upper twig of the facialis. The paralyses were present five days antemortem. Clinical diagnosis, meningitis. Autopsy: edema of the brain; no meningitis; no cerebral lesions; arterio-sclerosis; diffuse bronchitis with hypostasis; diffuse pyelo-nephritis secondary to cystitis; hence uremia.

Case 2. Married woman, 33 years old; denies syphilis and abortions; mind wanders and her accounts of her previous history and present illness are unreliable. No edema; no leucoderma; no eruption; slight alopecia; pharynx and mouth negative; pulse, temperature and respiration negative; reflexes somewhat increased. Sensation normal except some general hyperesthesia, especially over tibiæ. The left abducens and left oculo-motor nerves and lower half of right facial nerve are paralyzed, power in the extremities is apparently normal, but the mental condition makes voluntary muscular tests difficult. The urine shows hyalin and granular casts and abundant albumin, still an additional intracranial lesion is suspected from the multiple nerve affections, and a process *ad basem*, possibly syphilis, is diagnosed. Antisyphilitic treatment is futile; sudden death. Autopsy: chronic parenchymatous nephritis with the usual microscopic urinary findings; dilated but not hypertrophied left heart; *brain absolutely negative;* hence no cerebral lesion, but uremia.

Case 3. Man, aged 40 years; admitted to Cook County Hospital in delirium without any history; marked arterio-sclerosis; tortuous brachials, atheromatous plaques on radials; pulse 90, tense, regular, quick; no temperature; left heart distinctly dilated, the apex being in vertical nipple line, strong and heaving; the second aortic tone very loud. Urine heavily loaded with albumin, but no casts nor formed elements found. Diagnosis: meningitis or uremia. No rigidity of neck, no ear disease, no temperature, no focal symptoms; retinæ negative. Because of the cardio-vascular changes and albuminuria, I diagnosed uremia. Autopsy: marked universal arterio-sclerosis; atheroma aortæ; hypertrophy and dilatation of both ventricles, especially the left; kidneys and other viscera wholly negative; a diffuse purulent meningitis over base and convexity emanating from empyema in sphenoid sinuses (v. s. regarding value of cardio-vascular signs in the diagnosis of uremia).

Case 4. A case closely resembling delirium tremens with a history of recent and ancient alcoholic excesses. Urine, 1018, much albumin,

1,500 to 1,800 cc. per diem; moderate number of hyalin, granular and epithelial casts; history of previous anasarca and ascites; left ventricle hypertrophied and dilated; pulse very tense with appropriate sphygmographic tracings; headache, delirium, soper and vomiting; no convulsions, but two sudden lapses into coma with temporary recovery; neuro-retinitis hæmorrhagica; suddenly a paralysis of the right and a paresis of the left rectus internus, lasting four days, causing diplopia, disappearing for three days, recurring with right ptosis. Death. Clinical diagnosis: secondary contracted kidney, cardiac hypertrophy and dilatation; edema of the brain. Confirmed by autopsy in every detail, the cerebral edema being very pronounced.

THERAPY.

Regarding the treatment of nephritis, I shall allow myself the same liberty of selection as in the diagnosis. Preventitive therapy is quite restricted save in acute nephritis which may sometimes become chronic. Causal (etiological) therapy usually comes too late, i. e. years after the lesion has become fixed. Antiphlogistic procedures and remedies to check albuminuria are of no avail.

Rest, exercise. The kidneys are known to be relieved by rest in the horizontal posture, since exertion, which *per se* may cause albuminuria, only increases pre-existing albuminuria. If at any time some exercise seems advisable, it should be given passively with the patient in the recumbent posture. The rest should be *absolute* as long as the heart is weak, the urine scanty or hydrops considerable. The importance of rest in bed was recognized as far back as the times of Bright and Bartels. With moderate renal involvement or in intervals of improvement, *relative* restriction is still to be enforced. Rest in bed not merely lessens the amount of waste products to be eliminated by the kidneys, but also so protects the skin and dilates its vessels that the cutaneous functions become more active and relieve the vascular tension within the renal circuit. I have treated two severe cases of parenchymatous nephritis with rest abed for a year with absolute recovery. Every one of us who believes a patient with a cold should remain abed, has noticed, perhaps in his own case, the great activity of the skin and the still more remarkable activity of the kidneys when the body surface is warm. I have sometimes wondered if this is not one at least of the reasons why nephritics pass more urine at night. At any rate fatigue, damp and cold must be avoided by measures well known to all and certainly best met by rest abed during the time of severe symptoms or of acute exacerbations. I am convinced that we as practitioners do not sufficiently insist on psychical rest. In men leading the strenuous life, I have often seen nephritis disappear when

nervous tension was relieved. Too often these subjects take physical exercise or courses of training after they were already exhausted by head work. Exercise in general should *supplant* work and not be taken *after* hard nervous strain.

Cures at water resorts have the general advantage that the diet and hygiene are there often best impressed on the patient, and the psychical or suggestive element is also in play. Diffuse nephritis, i. e. that variety with considerable change both parenchymatous and interstitial, is most helped.

Diet. The principles of diet are well known. The food must be non-irritative and must not especially tax the kidney in its elimination. Disease of the glomeruli alone may be compensated by vicarious excretion of water through the lungs, skin and intestines, but disease of the tubules, whose function is the elimination of the end products of albuminoid metabolism, cannot be well compensated by other structures, whence the indication for limitation of albuminous foods and their replacement by fats and carbohydrates. The amount of albumin lost through the kidneys is small and can easily be met, e. g., by a glass or two of milk daily, wherein nephritis differs from diabetes in which the system not only is irritated by unappropriated sugar but loses a vast amount of heat and energy units each day. The albumin is then restricted only to spare irritation of the excreting renal cells. Fats as butter, olive and cod liver oils, cream, etc., are most important. As in diabetes, however, the restriction must not merely concern renal and other irritation, but also and above all the maintenance of nutrition, especially when the patient suffers from parenchymatous nephritis, the very form where diet restriction is theoretically most demanded. Anemia and disturbed nutrition are perhaps the two most distinguishing features of the parenchymatous as contrasted with the interstitial type of nephritis. The individual patient must be considered above and beyond the disease *per se* or the type of the disease.

The *milk diet* is free of extractives, is easy of digestion and is a diuretic. It may cause dyspepsia and is somewhat short in carbohydrates, points usually easy of correction. Few people cannot take milk if it is taken as a food and not as a beverage, i. e., if it is eaten, plain or diluted and is not cascaded into the stomach. The question recently reintroduced regarding the amount of extractives in red meats will not be argued. Meat and eggs should be restricted in all forms but cannot be absolutely interdicted.

Irritants as cheese, relishes, horseradish, onions, broths, beef tea

and alcoholics should be absolutely avoided, and tea and coffee taken only with the greatest moderation since they may aggravate or indeed even produce nephritis. The treatment must unfortunately too often be purely symptomatic.

The *edema* demands treatment since it forbids movement, threatens suffocation by pulmonary, laryngeal or other edema, increases the danger of secondary infections, as erysipelas, cellulitis, etc., embarrasses the circulation by pressure on the afferent capillaries, as well as on the efferent lymphatics and venules, and finally interferes with digestion and increases the danger of uremia.

The diuretics have proven most unsatisfactory in my experience, save milk and effervescing salts. While cathartics may eliminate fluid as well as solid retention, drastics must not be given without care of the digestion and the nutrition. Sweats are much in vogue, possibly less so of late. While the functional reciprocity between the skin and kidneys cannot be overestimated, yet profuse sweating must result in the elimination of fluids rather than of solids. Leube holds that sweats concentrate the blood, and therefore rather predispose to uremia. He states that when a patient sweats 1000 cc. (1 liter) only 1 gram of urea is evacuated.

Personally I have seen more cases with aggravation of symptoms or indeed with a fatal issue after sweating than cases relieved by the procedure, and hence have come to prefer the old fashioned full warm bath, as recommended first by Osborne and then by Liebermeister, to the more active methods. I am a great friend of the mechanical method of overcoming anasarca. Any other remedy which can remove the hydrops must first bring the fluid with its quotum of urea, extractives, etc., into the circulation with the ever present danger of inducing uremia. The already impure blood is again contaminated from the toxic deposits in the edematous tissues. If the kidneys and other emunctories cannot relieve the blood, how can they remove the additional refuse in the anasarcous fluid, maybe amounting to quarts, which comes to the blood from the tissues?

I have experimented somewhat even with mild cases and almost invariably employ deep, three inch long incisions over the lower leg (not over the malleoli where infection from the feet is more likely) whenever the hydrops is at all extensive. In testing the fluid evacuated, I have frequently obtained 2/10 to 3/10 of 1 per cent. urea which may serve as a measure for other retained products of kindred nature. When one to three gallons of fluid will seep out during the first twenty-four hours, one is well justified in incising the legs,

despite the occasional danger of infection. Drugs seldom achieve equally rapid or safe results.

The question after all resolves itself into the care and stimulation of the heart which opens up the endless topic of cardiac stimulation. Mental excitement, nervous strain, physical exertion, tobacco, coffee, alcoholics, exposure to heat, constipation, etc., must be avoided for the sake of the heart. The more the heart hypertrophies the better and longer the outlook, although ultimate cardiac dilatation is inevitable unless indeed death comes sooner under the strain of a pneumonia, pleurisy, etc., etc. In the uremic seizures, with precisely the same picture in other respects, the heart may vary, beating too strongly as in an apoplexy, or too weakly. With cardiac overaction, which may have a bearing on the auto-toxemia, the angiospasm or the high tension must be corrected by vaso-dilators, and by venesection. Bleeding may so relieve the intracranial blood pressure as to remove for the time the uremia, but too often it does not. It may be followed by subcutaneous salines or salines by the rectum which serve as a "lavage of the blood" and stimulate the dormant kidneys if enough sound tissue be left to appeal to. The wasted small kidneys seen at autopsy explain the frequent therapeutic failures. The sweats are distinctly contra-indicated here since they overtax or fatally depress the heart. Cardiac asystole demands heart stimulants.

When the question of a cure of nephritis comes up, we must recall that nephritis not infrequently less recovers than becomes latent. Latency, however, is at least improvement.

The chief considerations and conclusions of the paper may be summarized as follows:

1. Carefully repeated routine chemical and microscopical examination of the urine every twenty-four hours, usually, but not invariably, detects acute and chronic nephritis.

2. The diagnosis of the albuminuric and non-albuminuric types of the nephritides is aided by searching examination of other viscera and parts, e. g., by disclosure of cardio-vascular changes, retinal involvement, etc.

3. These visceral or somatic changes, usually present in nephritis, may be lacking in concrete instances or be capable of other or diverse interpretation, as polyuria, atheroma, etc.

4. The urinary findings, most essential to the diagnosis of nephritis, may be lacking, as may other signs and symptoms of minor dignity. Hence, as we fear instinctively, as it were, the existence of

nephritis in certain cases before we examine the urine, so we may still fear its existence after negative urinalysis.

5. Nephritis may be unattended by albuminuria. Such nephritis is usually interstitial in type, of which cases abound in literature.

6. While certain instances of non-albuminuric nephritis correspond to the type described by Dr. D. D. Stewart, yet non-albuminuric nephritis may not exactly correspond to said type, since acute nephritis, chronic parenchymatous nephritis, and chronic interstitial nephritis may exceptionally occur without albuminuria.

7. Casts should always be searched for; they are more constantly found than is albumin, yet they seem in certain instances to betoken renal degeneration rather than inflammation. They are not invariable in nephritis nor are they invariably nephritic.

8. Future clinical caution and pathological examinations will probably increase the number of cases of non-albuminuric renal inflammation of acute, subacute, and chronic types.

9. Non-albuminuric nephritis is of especial importance (e. g., Stewart's type) in life insurance and kindred examinations and in practice, since prophylactic measures may be instituted and the prognosis obviously influenced.

10. Uremia may readily be confused with organic brain lesions and vice versa. Every focal brain symptom has been seen in uremia.

11. Uremia and brain disease may coexist.

12. In treatment, rest to spare the kidneys and save the heart, is of prime importance.

13. Rest applies to nervous strain as well as to physical work.

14. A diet is selected which does not irritate or tax the kidneys in its elimination.

15. The nutrition of the case requires individualization. The classical diet must be abandoned when demanded by loss in body weight or by increasing anemia.

16. Edema is poorly managed by diuretics; cathartics too often threaten assimilation and nutrition; sweats tend to concentrate the blood and rather favor uremia.

17. Mechanical drainage for edema is the best procedure, since it removes not only the fluid but the impurities it contains without entailing their repassage through the already surcharged blood and lamed kidneys.

18. The prognosis and treatment are often a question of the heart, its efficiency and its response to cardiants.

REFERENCES.

1. Senator. Erkrank. der Nieren. Nothnagel's System, Bd. xix., Theil v., Abth. 11, S. 174.

2. Tyson. Practice of Medicine, 1897.

3. Semmola. Nuove contribuzioni sperimentali alla patogenia discrasica o ematogena dell' albuminurica brightica. Riforma medica, 1894, No. 254.

4. Qurirolo. Riforma med., 1896, No. 99.

5. Dickinson. Allbutt's System, vol. v., p. 369.

6. Bartels. Ziemssen's Pathologie und Therapie, Bd. ix., p. 247.

7. Henoch. Berliner klin. Wochensch., 1893, No. 50.

8. Rosenstein. Nierenkrankheiten, pp. 128 and 144.

9. Nierenkrankheiten in Nothnagel's System, specielle Pathologie u. Therapie.

10. Leube. Diagnostik der inneren Krankheiten.

11. Lecorché and Talamon, p. 610. Traité de l'Albuminurie et du Mal. de Bright.

12. *Ibid.*

13. Roberts on Urinary Diseases, p. 355.

14. Lancereaux. Trans. Internat. Med Congress, 1881, vol. xi., p. 191.

15. Delafield. Twentieth Century Practice, vol. 1.

16. Sehrwald. Deut. med. Wochensch., 1890, No. 24.

17. Stewart, D. D. Occurrence of a Form of Chronic Bright's Disease, other than Typical Fibroid Kidney, without Albuminuria. Transactions Pan-American Med. Congress, 1893, p. 191. See ref. 23-24.

18. Wilkes. Guy's Hospital Reports, second series, vol. ii.

19. Millard. Chronic Bright's Disease.

20. Mahomed. Guy's Hospital Reports, 1879, vol. xxiv.; and Chronic Bright's Disease without Albuminuria. Ibid., 1880-81, vol. xxv.

21. Lubarsch. Centralbl. f. allgem. Path., Bd. iv., No. 6; Aufrecht, Centralbl. f. klin. Med., June 30, 1893.

22. Purdy. Pre-albuminuric Stage of Chronic Bright's Disease. Chicago Medical Journal and Examiner, May, 1885.

23. Saundby. Occurrence of Dropsy in Granular Kidney. Hue. Thèsis, Paris, 1859. Huchard. Union Médicale, 1874. Millard. New York Med. Jour., 1882. Guesdon. Thèse, Paris, 1882. Delespierre. Thése, Paris, 1884. Gand Delalande. Thèse, Paris, 1884. Dieulafoy. Soc. Méd. des Hôp., 1886. de Coquet. Thèse de Bordeaux, 1890.

24. Key. Om. S. K. Tubularaf jutringarmas, Stockholm, 1863.

25. Meyer. Virchow's Archiv., Bd. v.. S. 199.

26. Rosenstein. Nierenkrankheiten, pp. 128 and 144.

27. Thomas. Archiv. f. Heilkunde, Bd. xiv.

28. Senator. Virchow's Archiv, Bd. lx.

29. Burkhart. Die Harncylinder, Berlin, 1874.

30. Fischl. Prager Vierteljahresschrift, 1879.

31. Bartels. Ziemssen's Pathologie und Therapie, Band ix., p. 247.

32. Nothnagel. Deut. Archiv f. Klin. Med., 1891, No. 43.

33. Edwards. American Journal Medical Sciences, October, 1898.

34. Edwards. Transactions Illinois State Medical Society, 1895.

35. Radomski. Gesammte Abhandl. a. d. med. Klinik zu Dorpat. Wiesbaden, 1893.
36. Daiber. Correspondenzblatt f. Schweizer Aerzte, 1894, No. 24.
37. Alber. Inaugural Dissertation, Würzburg, 1894.
38. Kossler. Berliner klin Woch., April 8 and 15, 1895, Nos. 14 and 15.
39. Leube. Specielle Diagnose Innerer Krankheiten.
40. Marion. Arch. Gén. de Médicine, March, 1895.
41. Leube. Der Symptomen Complex Angina Pectoris Physiologisch Analysirt, Correspondenzbl. f. Psychiatrie von Erlenmeyer, 1866.
42. Money. Treatment of Disease in Children, 1886.
43. Landois. Die Uraemie.
44. Bochefontaine and Lépine. Compt. rend., T. 83; Arch. de Phys. Norm. et Path., 1876; Landois, die Uraemie, S. 120.
45. Lépine. Révue de Méd., 1889.
46. Strümpell. Arch. der Heilkunde, 17 Jahrg., 1876, p. 40.
47. Rosenstein. Nierenkrankheiten.
48. Huguenin. Ziemssen, Handb. Spec. Path. u. Ther., xi., Bd. I., S. 518.
49. Jaccoud. Lec. de Clin. Méd., Paris, 1887; also Nouvelle Diction. de Méd., Paris, 1883.
50. Kussmaul. Berl. Klin. Woch., 1871.
51. Rose. Pitha-Billroth Handbuch, Band I., Abth. 2.
52. Weiss. Wiener Med. Woch., 1881, Nr. 4.
53. Cohen. Gaz. d. Hôp., 1853.
54. Strümpell. Arch. f. Heilkunde, 1876.
55. Bartels. Virch. Archiv, Bd. 56.
56. Weiss. Wiener Med. Woch., 1881, Nr. 90.
57. Fuchs. Gynaek. Centralbl., 1882.
58. Baginsky. Schmidt's Jahrbuch, 1887.
59. Addy. Lancet, 1875.
60. Paetsch. Zeitsch. f. Kl. Med., 1881, Band III.
61. Churchille. Arch. Gén. de Méd., 1855.
62. Imbert-Gourbeyre. Des Paralys. Puerpér., Paris, 1861.
63. Rego. Const. Jahresb., 1842.
64. Dernblüth. Const. Jahresb., 1842.
65. Bourdillat. Gaz. d. Hôp., 1866. 38.
66. Lequimas. Bull. de l'Acad. de Méd. de Belge, 1856.
67. Raymond. Rèv. de Méd., Sept., 1885.
68. Charpentier. Presse Méd. Belge, 1880.
69. Chantemesse et Lenneson. Rév. de Méd., Nov., 1885.
70. Dieulafoy. Gaz. d. Hôp., 1867.
71. Sell. Hosp. Lid. R. 2, 1884.
72. Rosenstein. Med. Centralb., 1858.
73. Traité de Méd. (Charcot-Bouchard.) Guinon, T. vi., p. 574.
74. Desnos. Union Méd., 1869.
75. Stenhouse Kirkes. Med. Times and Gaz., 1855.
76. Liebermeister. Prager Vierteljahrl., Jahrg. xviii. Bd. iv., S. 17.
77. Biermer. Virchow's Arch., Bd. 19.
78. Dubois. Ann. d'Obstet., 1843.
79. Lauer. Canst. Jahresb., 1842.

80. Chauffard. Arch. Gén. de Méd., 1887.
81. Burkmann. Deut. Med. Woch., 1880.
82. Van Vyre. Arch. Quéd. Belges, 1876.
83. Traube. Berl. Klin. Woch., 1867, Nos. 47 and 48.
84. Bourdillat. Gaz. de Hôp., 1866.
85. Legroux. L'Encephale, 1885, No. 1.
86. Werner. Deut. med. Woch., 1883, No. 64.
87. Burrows. Physiol. and Patholog. Observations on Blood and Urine. London Med. Gaz., vol. xxiv., p. 535.
88. Dieulafoy. Communications à la Société des Hôpitaux, 1886.
89. Marion. Archives Gén. de Méd., March, 1895; also British Med. Journ., March 30, 1895.
90. Stewart. A Further Communication on the Occurrence of Hitherto Undescribed Form of Chronic Nephritis Unassociated with Albuminuria. American Jour. of the Med. Sciences, December, 1893.
91. Stewart. Medical News, April 14, 1894.
92. Johnson, George. Lectures on Bright's Disease, p. 52.
93. Dickinson. Treatise on Albuminuria.
94. Tyson. Bright's Disease and Diabetes, p. 178.
95. Millard. Bright's Disease, 141.
96. Litten. X. Congress f. Innere Med., 1891.
97. Rickenbach. Nephritis without Albuminuria. Pittsburg Med. Rev., 1896, p. 245.
98. Barrie. Clinical Significance of Renal Casts. Medical Record, New York, 1897, vol. i., pp. 111-113.

THE MOIST DRESSING IN THE TREATMENT OF COMPOUND FRACTURES.

BY CHARLES H. LEMON, M. D.,
OF MILWAUKEE.

No operation the average surgeon is called upon to make, requires a more thorough knowledge of technic or a keener appreciation of the complex pathological process we term "inflammation" than an operation for the reduction of a compound fracture of one of the long bones. Wounds of the soft parts may be carelessly treated and the only damaging evidence that may remain is an ugly scar. Where, however, the crushing force is continued a step further and we have added a fracturing of bone structure, that which was a comparatively harmless injury, is at once transformed into a formidable injury that threatens life.

The lack of knowledge of antisepsis was the cause of the sacrifice of numberless lives and limbs in the pre-aseptic period of surgery and we have but to scan the official records of the Medical and Surgical History of the Civil War to realize what a terrible sacrifice it was.

The prevalence of suppuration and of hospital gangrene in every large camp, at some time during its existence, is to my mind the most sickening spectacle those records reveal. The very stumps of limbs sacrificed to prevent the onset of sepsis became themselves breeders of that fatal disease. These facts are recalled at this time because nowhere else in the whole field of operative surgery are they so applicable. We do not see hospital gangrene. Probably none of our younger surgeons ever saw a case; yet we know a form of gangrene which, if not so fatal as its formidable predecessor, is none the less dangerous to the integrity of the limb affected and sometimes to the life of the patient also.

When we contrast the military surgery of a generation ago, with that of the Greco-Turkish and Spanish-American wars, in which, so far as reports show, no primary amputations were made in gunshot fractures or in wounds of the knee joint, except where destruction of essential structures occurred, it becomes evident that the only technic is that which takes cognizance of the danger of microbic infection and provides for the elimination of septic micro-organisms from the field of operation by careful disinfection and thorough drainage at the time of the primary operation.

Is it not true that everything to-day is aseptic except the doctor himself? We have perfect operating rooms, thoroughly competent attendants, materials that stand a biological test, and yet we have sepsis. With all our progress and boasted technic we find doctors who maintain that almost any result short of amputation (and we will not be much amiss if we include that also) is good surgery in the treatment of a compound fracture. Any result, short of amputation, is attributed to a wonderful intervention of Divine Providence and is evidence of consummate skill on the part of the medical attendant.

In the treatment of simple fractures, this self-laudation of many a surgeon has received a rude shock with the revelations the x-ray has made of some of his fine (?) work. We have educated the laity, through many years of schooling, into the belief that when a bone is "set," it is as securely fastened—once for all—in its anatomical bed as though the relations of its several fragments had never been disturbed. Since the laity have been making x-ray shadowgraphs for us, we have learned to be less certain in our conclusions as to the

character of the fracture that is present and much more conservative in our expressed opinions as to just how nicely we have "set" the fractured bone. In fact, could we always have our own way about it, we would prefer to have the laity less inquisitive about surgical landmarks, and that sort of thing, but if they persist in their inquisitiveness, we will have to meet it by having their fractures "taken" before we "set" them, trusting to luck that, in a good functional result, they will rest secure in the belief that we have performed the miraculous and have made in each case a perfect end to end approximation of the fragments.

The time has come when we must admit that we will have to do something better in the treatment of compound fractures than simply to tell the patient victim two years after his injury that his recovery is "simply marvelous!" If he resorts to the x-ray and demonstrates an unpardonable overlapping of the fragments, with a callous formation that suggests an osteo-sarcoma, as well as a fistula remaining as an index to the seat of the fracture, he may think differently. Furthermore it is becoming embarrassing for medical experts to sit in the witness box and make hair-splitting distinctions in order to defend such practice and yet keep themselves in the great realm called Truth.

The reason there are so many failures in the treatment of compound fractures, is a misplaced confidence in the ability of bone structure to successfully combat infection.

The fact should never be forgotten that, owing to the unyielding character of bone tissue with its rich supply of lymph in the perivascular spaces of the Haversian canals, infection is always followed by a rapid spread of inflammation in the Haversian canals and their tributaries, the canaliculi of the Haversian systems.

The distinguished authors of our text-books on the Principles of Surgery and Surgical Pathology have devoted many chapters to a careful consideration of the history of osteomyelitis and we have, through the light their careful experiments have shed upon this formidable disease, arrived at a clear understanding of its etiology. We have learned, if we have not read in vain, that when suppuration occurs in bone tissue there is no such thing as spontaneous recovery. The focus must be sought out and removed, and that as soon as a diagnosis is made.

Surgical Pathology has revolutionized the bone operations of the older surgeons and has sufficiently emphasized the danger of infection in bone, to impress upon us the necessity of directing our efforts in the treatment of compound fractures towards the prevention of infec-

tion in the fractured bone. That sepsis is the exception, as a sequel to operations in our hospitals, is a splendid tribute to the achievement of modern surgery. Surely, then, we cannot be wholly blameless if we fail to recognize the responsibility that devolves upon us of eliminating infection and converting as quickly as possible a compound into a simple fracture by aseptic regeneration.

The abdominal cavity more readily takes care of infection introduced from without than the fractured ends of a bone; and the reason such cases are undertaken by many general practitioners is that they are not rapidly fatal, and if severe sepsis does occur, an experienced operator can be called in to treat it or amputate the leg as a last resort.

Need further argument be adduced to emphasize the statement that there is no field requiring more careful technic?

"The shadow of death hovers over the knee joint." The frightful results that have followed injudicious meddling with this cavity have inspired a holy fear of it. With none the less fear should we approach a compound fracture that does not involve a joint. The dramatic twisting and pulling of the lower fragment of a simple fracture finds no place here. We are seldom present when the fracture occurs and the bones protrude. If they remain open to the air without handling until our arrival, no additional harm will come if they remain exposed a little longer until we have prepared our hands as though we expected to open the knee joint and sterilized the field of operation, as well as the protruding fragments, before we replace them.

Definitive technic in the treatment of compound fractures will not be dwelt on in this paper, which will have reference only to the subject of primary wound infection at the seat of the fracture and a plan will be proposed to combat or prevent it. In proposing this treatment the writer is presenting nothing new; he is merely epitomizing the best experience of a large number of successful surgeons.

All truth is axiomatic and self evident when revealed. The title of this paper, "The Moist Dressing in the Treatment of Compound Fractures," may suggest the thought that the profession is sufficiently familiar with this treatment to need no further elucidation and yet the writer ventures the earnest opinion that such is not the fact.

In order to clearly understand the term "moist dressing" for the purpose of this paper, we must accept it in a narrow, technical sense. We must not understand it as meaning simply a "wet" dressing. Its efficiency is not contingent upon the thoroughness with which we "soak" the dressings that are to be applied to a wound. In fact, a "moist dressing" is so seldom a "wet" dressing that we are fortunate in possessing two words in the English language that so admirably

distinguish between these two conditions. A "wet" dressing, as usually applied, becomes in a few hours, by evaporation, a dry dressing in every sense of the word, except that in a suppurating wound it is "plastered" on the wound side with a film of pus. The "moist dressing," however, remains moist, cannot become dry and does not become plastered with pus.

By way of definition therefore it may be said that a "moist dressing" consists in the application of hygroscopic gauze moistened or wrung out of water, or an antiseptic solution and applied to the skin or a wound surface and its evaporation and consequent drying prevented by the application over it of some impervious material as oiled silk or gutta percha tissue. It is applied in a wrung out or a moist condition, in many layers and by its hygroscopic character promotes by capillary attraction the absorption of wound secretion, removing it, in a steady stream, as it were, from the cut surface to the most distant parts of the overlying dressing, distributing the wound secretion evenly, and what is most important, preventing its accumulation in the wound itself. As applied to recent wounds, it stimulates the regional capillary circulation in the cut surfaces and induces a vigorous blood current which mechanically washes out of the wound, infective material and brings an abundance of blood tissue to the threatened area, the best antiseptic we know, if the preponderance of infective material is not too great.

In treating a compound fracture, a piece of gauze, or some strands of cat gut is introduced through the wound or, better still, through some dependent portion adjacent thereto, acting as a wick, through which is conveyed a constant stream of blood serum and corpuscular elements, carrying along with it adventitious matter and when the active process has ceased at the end of twenty-four to forty-eight hours, we have in the region of the cut surfaces and fractured bones a vigorous capillary circulation that defies a less formidable foe.

Such a wound examined from twenty-four to forty-eight hours after an injury, presents no swollen or everted edges. There is no redness suggesting capillary engorgement or stasis in the region of the wound. The bruised tissues are not sloughing and no pus exudes. The wound surfaces are gently cemented together. The skin edges are as you left them. There is no tension. The patient complains of no pain and there is no fever. When you have accomplished this, you have reached an ideal result in the course of the treatment. You have thus far successfully combated sepsis and with the parts beautifully co-apted you may now discard the "moist dressing" and apply a dry one, in which no impervious material is used. If your technic has

been thorough again, when you remove this dressing you will have a sealed, aseptic wound.

It will be said that the "moist dressing" is faulty in a clean wound; that it macerates the skin; acts as a poultice; induces infection and breeds bacteria because it retains heat and moisture. These objections have been urged many times. The objectors should try the "moist dressing" along the lines indicated. They would have better results in their work.

The question has been asked why, if such results follow the use of the "moist dressing," we do not always use it in all kinds of wounds? Why restrict its use to accidental or suppurating wounds, such as compound fractures? The answer is, that all accidental wounds are infected wounds; that infection in a wound is a foreign body, a chemical irritant and that it induces an excessive wound secretion by reason of its irritant power. Further, if it were certain that infection had been thoroughly eliminated from an accidental wound and there was little bruising of the soft parts, there would be no necessity for its use. The dry dressing would be preferable. But how can we be sure?

It is easier to prevent infection than to combat it after it has occurred. In an accidental wound involving bone structure, when in doubt as to asepsis in the wound, it is criminal not to provide for drainage. It is negligence to depend upon a dry dressing superimposed upon a wound where there has been extensive traumatism of the soft parts. Here capillary thrombosis occurs causing stasis of the blood current and capillary stasis favors infection. Facilitate the capillary circulation by elevation of the limb and the use of the "moist dressing" as described above and the mural implantation and stasis disappear. By furnishing an outlet to engorged capillaries stimulated by chemical irritants in the form of the product of bacteria we prevent infection and remove the bacteria or destroy them.

As a further argument for the necessity of a free blood current let it be urged that it is far safer to close without drainage a compound fracture of the femur than of the tibia. In the former you have a large blood supply in great masses of muscles, furnishing as in the scalp, a vigorous circulation competent to overpower colonies of bacteria. In the tibial region, however, the skin and subcutaneous tissues alone anteriorly cover the underlying bone. The blood supply is scanty and the tissues therefore low in physiological resistance to infection. The fractured tibia is not safely buried in muscle. It almost protrudes through the sutured skin. Here we may not doubt. We must be certain.

There are times when sepsis follows the most carefully planned elective operations, and this is true also of operations made in the treatment of compound fractures. We also occasionally see cases long after the reception of the injury, when in addition to an osteomyelitis we have a phlegmonous condition of the soft parts. Here the "moist dressing" is followed by the most brilliant results. Under an anesthetic we remove the suppurating tissues and in a few weeks convert a suppurating wound into a clean wound. The destruction of tissue ceases, the patient begins to eat, he regains his strength and the wound heals.

A brief summary of two cases will illustrate admirably the theme under discussion.

Case I. Mrs. R., aged 60, 5 ft. 2 in. high, weight 240 pounds, in July, 1900, fell down a cellar stairs and received a compound Pott's fracture at the left ankle. A wound of the skin three inches long immediately above the inner malleolus and transverse to the long axis of the leg, permitted the end of the upper fragment of the tibia to protrude. The fracture was reduced by relatives of the patient before the arrival of the family physician who was not permitted to make any active interference and was obliged to content himself with a careful sterilization of the surrounding skin and of the external wound. Suppuration occurred, and owing to the fact that the wound was treated by the open method, there was free drainage and suppuration did not occur beyond the area of the wound. The case was seen in consultation eight weeks after the injury and at this time there was union of the fibula. The lower fragment of the tibia, which had disintegrated, was removed and the upper fragment scraped. The wound was flushed with a 2 per cent. carbolic solution and a heavy "moist dressing" applied. In eight weeks a cavity large enough to admit a finger and in depth corresponding to the diameter of the tibia, had closed.

The operation was made in a farm house and the subsequent treatment carried out by the family physician, who dressed the wound as described above, and while slight suppuration again occurred, he promptly aborted it by the continued use of the "moist dressing."

This case illustrates what conservative treatment will accomplish. The bone became infected when it protruded and the sepsis that occurred was of a mild type, sufficient to prevent union and cause necrosis of the lower fragment, but no serious damage was done and treatment by the open method, without suture of the skin, prevented regional infection of the soft parts. Had the physician been permitted to make a thorough disinfection of the bone and follow this with the application of a "moist dressing" at the time of the injury, the time of the disability might have been shortened, yet the healing was complete at the end of four months.

Case II. Mr. R., age 36, 6 ft. 3 in. high, weight 180 pounds, in September, 1900, received a compound Colles' fracture of the right forearm by being caught between the bumpers of two freight cars. He walked to a neighboring hospital where his arm was dressed and the skin wound on the anterior aspect of the wrist, sutured. Gauze drainage was used and a heavy "dry" dressing applied.

The case came under observation one week later with a large phlegmon of the entire arm and forearm. Under an anesthetic multiple incisions were made from the hand to the shoulder and five rubber drainage tubes were inserted. Huge "moist dressings" of hot saturated boric acid solution were applied and in three weeks the suppuration had ceased. No attempt was made at this time to examine the site of the fracture as great embarrassment of the circulation was present. Five days after the introduction of the drainage tubes sloughing of the ulnar artery occurred near the wrist which was controlled by the application of forceps.

November 15, 1900, as suppuration persisted at the site of the fracture after swelling of the soft parts had disappeared, an anesthetic was again administered and the disintegrated distal fragments of the radius and ulna and a suppurating focus in the proximal fragments of both bones were removed.

As in Case I, the wound was packed with iodoform gauze which was gradually removed by the end of the week and a large "moist dressing" of saturated boric acid solution was applied. No suppuration occurred. At the end of ten days the "moist dressing" was discarded and a "dry" one of iodoform gauze substituted. The wound is still aseptic and almost entirely closed four weeks after the last operation.

What does this case teach?

First, the fallacy of depending upon a "dry" dressing to remove wound secretion in a compound fracture, with severe contusion of the soft parts.

Second, that if you do not provide for the removal of dead blood tissue, exhibited in the wound secretion of a compound fracture, by the use of a "moist dressing," you simply invite sepsis and foster it by causing capillary engorgement in the area of the wound through tension. You set in motion a chain of events which result, as in this case, in a permanent impairment of function. That the patient will have a useful hand is certain, but how much nearer the ideal the recovery would have been had the established principles of surgery been followed from the beginning, can be left to conjecture.

So long as the law of capillary attraction is effective, the argument here made for the use of the "moist dressing in the treatment of compound fractures" will hold good. We know, however, from personal experience that it is not understood and we also know that were it better understood, there would be fewer unfortunates wasting their valuable time in an almost hopeless effort to rid themselves of a chronic traumatic osteomyelitis.

A CASE OF BROMODERMA PUSTULO-TUBEROSUM.

BY M. MILTON PORTIS, B. S., M. D.,
OF CHICAGO.
(*From the Laboratory of Pathology, Rush Medical College.*)

It is with the kind permission of Dr. Baldwin, that I report this case which entered the Cook County Hospital during his service.

The little patient, Ida J., aged four months, entered the hospital December 13, 1901, with a history of a two weeks' illness, which began with fretfulness, crying spells and vomiting. The next day, the mother noticed a rash on various parts of the body, which she described as elevated, reddish patches. These soon looked pale, and in a few days suppurated and began to form crusts.

The child had been given absolutely no medicine at any time. The mother, however, had taken some medicine, a short time before the onset of the child's illness, which upon investigation proved to be bromides. The case was so peculiar and puzzling, that Drs. Hyde and Zeissler were invited to see it, and they concurred in the diagnosis of a bromide eruption.

When the baby entered the hospital, it was healthy, bright and playful, and weighed twelve pounds. During her stay she had an occasional afternoon temperature. The general physical findings were negative.

The skin of the face, right shoulder and both forearms presented circumscribed patches, covered with a greenish-brown crust, on which could be seen scattered pustular points.

These areas were irregularly oval and varied in size, the largest being on the right cheek and measuring almost two inches in its longest diameter. The margin was dusky red and indurated. Some of these patches had a semi-fluctuant sensation. Removal of portions of the crust left a bleeding angry surface.

HISTO-PATHOLOGY.

Small pieces were taken from the margin of several areas, and sections were stained with the various general and special stains.

In all portions of the tissue changes were visible. The crust is quite thick and composed of entangled masses of blood, fibrin, keratohyalin and leucocytes. The corneous cells are present in whirls and in fibres making a perfect meshwork, but nowhere can a normal stratum corneum be seen, for it has been separated and torn by the exudate.

The stratum mucosum is thickened, its processes elongated and irregular, and many of its cells present mitotic figures. Here and there are areas of round-cell infiltration, at times forming small abscesses.

In the corium, there are numerous areas of round-cell infiltration, especially around the hair follicles and glands. Scattered throughout the specimen are numerous mononuclear cells, with basophilic granules which seem to be mast cells.

Under treatment with Fowler's solution, the child left the hospital April 15, 1902, completely cured.

WISCONSIN MEDICAL JOURNAL.

OFFICIAL ORGAN OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A Monthly Journal, published by the Wisconsin Medical Journal Publishing Co., and owned by and devoted to the interests of the Medical Profession of this State.

Original articles, Clinical notes, Correspondence, and Communications of interest to the Medical Profession are solicited. Reprints of articles contributed to this Journal will be furnished at cost price, but a number of copies of the Journal will be furnished contributors gratis. All manuscripts should be typewritten.

ARTHUR J. PATEK, A. B., M. D., Editor,
121 Wisconsin Street, Milwaukee.

Associate Editors.

CHAS. S. SHELDON, M. D., Madison. OTTO H. FOERSTER, M. D., Milwaukee.
HOYT E. DEARHOLT, M. D., Milwaukee.

Collaborators:

Horace M. Brown, M. D.,	Milwaukee	U. O. B. Wingate, M. D.,	Milwaukee
Arthur J. Burgess, M. D.,	"	Chas. Zimmerman, M. D.,	"
Richard Dewey, M. D.,	"	Frank H. Edsall, M. D.,	Madison, Wis.
Louis Frank, M. D.,	"	W. E. Fairfield, M. D.,	Green Bay, "
Walter Kempster, M. D.,	"	Wm. E. Ground, M. D.,	W. Superior, "
William Mackie, M. D.,	"	Julius Noer, M. D.,	Stoughton, "
Solon Marks, M. D.,	"	Chas. W. Oviatt, M. D.,	Oshkosh, "
P. H. McGovern, M. D.,	"	L. H. Prince, M. D.,	Palmyra, "
Gilbert E. Seaman, M. D.,	"	H. Reineking, M. D.,	Sheboygan, "
Wm. H. Washburn, M. D.,	"	W. T. Sarles, M. D.,	Sparta, "

Annual Subscription, - - - $2.00. Single Copies, - - - - - $0.20.

Address all business communications to
M. M. TAYLOR, Business Manager,
709 Herman Bldg., Milwaukee, Wis.

Vol. II. JUNE, 1903. No. 1.

EDITORIAL COMMENT.

ANNOUNCEMENT.

At the last annual meeting of the State Medical Society of Wisconsin, the favorable report of the Business Committee upon an offer made by the WISCONSIN MEDICAL JOURNAL for the publication of the State Society's transactions in serial form—was adopted by a unanimous vote of all present. By this action the JOURNAL becomes the official organ of the State Society. The wisdom of this choice will—we trust—commend itself to physicians throughout the state.

The secretary of the Society, Dr. Chas. S. Sheldon, of Madison, becomes an Associate Editor of the JOURNAL, and will—as such—have full charge of all matters pertaining to the State Society's proceedings, including the publication of the business transactions of the annual meeting, and the papers read; he will also—from time to time—make announcements to members of the Society through the medium of these columns, and members are here requested to give such communications the full weight of notices formerly sent to them individually.

STATE MEDICAL SOCIETY MEETING.

The most important meeting ever conducted by the State Society was recently held in Milwaukee. The attendance was large, and interest in the papers presented and in the proceedings was constantly manifest.

From the standpoint of program alone the meeting was a success, though, no doubt, action on the proposed reorganization in conformity with the recommendation of the American Medical Association was a strong drawing card, and crystallized interest in this meeting. The motion—passed early in the session—that matters of business could be introduced at any time and referred to a committee for report before the business meeting proper, prevented undue accumulation of work, and so it happened that matters formerly presented at the business session only, were constantly planning, and this added new vim and vigor, and focussed the attention of large audiences at every meeting.

Matters of great importance were discussed, and the emphatic manner in which the adoption of the new Constitution and By-Laws —bringing this state into the fold occupied by 22 states gone before —was carried, testified generously to the fact that Wisconsin physicians are not so closely wedded to precedent and tradition that their horizon is incapable of liberal expansion.

Among other matters worthy of special mention, are the appointment of a Provisional Council having the powers of a House of Delegates, and privileged to exercise all its prerogatives during the coming year.

The decision to publish the Society's proceedings in journal form, in monthly installments, is an active step in the line of progress, and will, we feel certain, stimulate the reading of the papers presented at the meeting.

The excellent papers of the guests, Drs. A. R. Edwards, of Chicago, and Wm. J. Mayo, of Rochester, Minn., were well received by large audiences.

Social features were not lacking, and the ladies' reception at Mrs. Wingate's residence, the smoker at the Milwaukee Medical Society's rooms, and the annual banquet proved agreeable diversions for Milwaukee's guests.

MEDICAL "GREEN GOODS."

A most interesting document has come to our notice. It is quite evident that there are still those in the medical profession who are so easily duped that the mere presence of the name of a reputable physician attached to the most openly bold-faced fraudulent scheme, will lend an air of respectability sufficient to "take in" a host of innocents. Though we hope to see but few Certificates of Membership in the Christian Hospital (incorporated under the state laws of Illinois) in the offices of respectable physicians, this cleverly worded scheme will doubtless be an attractive, tempting bait to many less reputable men, especially to those who having a dearth of diplomas with which to impress inquisitive State Board members look for something which "imparts confidence to visitors and patients, and is a much stronger drawing card than an ordinary diploma, as it indicates a higher attainment." In addition to a certificate of membership for from $15.00 to $25.00, one is presented with a solid gold lapel button, and a pocket membership ticket, "which alone, if judiciously displayed, will bring more dollars than the cost of membership." "Dollars to Doctors" is also furnished, and a new book on "Case-Taking and Fee-getting." And all this for 15 to 20 or 25 dollars! A similar scheme was quite successfully worked several years ago, and this time Dr. N. Senn was taken to head the list; now Dr. J. B. Murphy's name leads all the rest. Moreover, we see Dr. Deaver's name used on a facsimile of the certificate.

That the use of these names in this manner was unauthorized, hardly needs the telling. That a scheme for decorating a doctor's walls with a parchment that has "the appearance of a regular Hospital Medical College Diploma." launched in this manner, is virtually a use of the mails for fraudulent purposes, there can be no question. If our information is correct, at least one of the gentlemen whose name appears on this handsome document, has worn stripes, and we trust that the laws of Illinois will land him and his thieving brood where they rightly belong.

A DISCLAIMER FROM DR. J. B. MURPHY.

Never for one moment doubting the falsity of the allegations made by the Christian Hospital, we felt it a duty, in response to the many inquiries received, to communicate with Dr. Murphy, whose name has been so maliciously used. We take much pleasure in giving space to the following letters:

Chicago, May 26, 1903.

My Dear Doctor:

I thank you very much for your letter of the 23rd, and in reply would say that the use of my name was, as you say, absolutely unwarranted. I have never seen, to my knowledge, any of the men connected with the institution, and have had absolutely no correspondence with them. It is a money-making scheme, pure and simple.

Enclosed please find a circular letter, which I have been sending in answer to correspondents.

The net is closing around these people, and we hope to secure an indictment within a day or two.

I shall be very glad if you will take the matter up in your journal and publish a very strong disclaimer.

Very sincerely yours,

J. B. MURPHY.

(Enclosure.)

Chicago, May 20, 1903.

My Dear Doctor:

In reply to your letter would say that the literature sent out by the "Christian Hospital" shows on its very face that it is a scheme for swindling doctors. My name was used without my knowledge or consent. Many of the men connected with it are the same who used Dr. Senn's name in a similar way in the "St. Luke's Hospital, Niles, Michigan, scheme" some years ago: and also the name of Dr. E. O. Kinsman, of Cambridge, Massachusetts, in September, 1901. I am informed that one of the men had served two and a half years in the Waupun penitentiary in Wisconsin.

The matter is now in the hands of the state's attorney, of Chicago, and the secret service of the postoffice department. We are going to make every effort, regardless of cost, to bring these men to justice for their nefarious conduct. A full expose of the matter will be given in the Journal of the American Medical Association.

Very truly yours,

(L.) J. B. MURPHY.

Dr. Arthur J. Patek,
"Wisconsin Medical Journal,"
Milwaukee, Wis.

THE INDEX MEDICUS.

The debt the medical profession owes Andrew Carnegie and the gentlemen who so wisely diverted several thousand dollars of the Carnegie fund for revivifying the Index Medicus, cannot be measured in words.

While realizing that several years' literary efforts of the world's contributors to medicine have—in part, at least—passed from view, we hail the first installment of the Index's new lease of life with much satisfaction and gratification. It is to be hoped—and we believe—the lapse of several years has been a sad lesson that will bear fruit—that when the present appropriation has been exhausted, this work will be permitted to live on, to the great profit of the medical profession—and through them to the world at large. The far-reaching benefits of this publication are such that the aid of Congress ought to be enlisted to secure the safe existence of the Index—in perpetuity.

DR. F. E. WALBRIDGE.

If the office ever sought the man, it did so in the election of Dr. F. E. Walbridge to the presidency of the State Medical Society for the ensuing year. The unprecedented enthusiasm the candidate's nomination evoked allows of but one interpretation—a unanimous vote of implicit confidence and trust.

NEWS ITEMS.

Assistant Surgeon General of National Guard.—The Wisconsin legislature recently passed a bill providing for the appointment of an Assistant Surgeon General of the National Guard, with the rank of Colonel. The office will carry with it a salary of five hundred dollars per annum and extra compensation while the officer is on duty with troops. Dr. John B. Edwards, of Mauston, formerly Surgeon General, has been appointed to the position.

Smallpox in Milwaukee.—Milwaukee is having some further experience with smallpox. The cases are confined almost wholly to the Polish quarter of the south side. During the week ending June 1st, some thirty cases have been reported, mostly among children attending the same parochial school; many of them have been removed to the hospital and others quarantined at home. The cases are light and the mortality nil.

F. E. Walbridge

PRESIDENT OF THE STATE MEDICAL SOCIETY OF WISCONSIN,
1903 - 1904.

Insanity Bill Killed.— It is very gratifying to learn that the bill recently introduced at Madison, the passage of which would have resulted in the compulsory personal appearance of every insane person in court before commitment—and mention of which was made in our last issue—was killed. Had the bill become a law it would have been a retrograde step in insanity legislation.

College Commencements.— The class of 1903 of the Milwaukee Medical College graduated in May, and numbered nearly fifty. The public exercises were held in the Alhambra theater; the president, Dr. W. H. Earles, conferred the degrees. The banquet of the graduating class was held at the Plankinton House and was a largely attended and enjoyable affair.

The commencement exercises of the Wisconsin College of Physicians and Surgeons were held May 28, at the Pabst theater. A class of thirty was graduated. The president of the college, Dr. A. H. Levings, conferred the degrees in the presence of a large audience of the friends of the institution. The exercises were followed by the usual class banquet at the Plankinton House, which was participated in by the faculty, alumni, and a number of invited guests.

Medical Society of Milwaukee County.— The burial of the differences that divided the physicians of Milwaukee County is an accomplished fact; a large and harmonious confederated County Society has resulted. The Milwaukee County Medical Society joins in a body with the Medical Society of Milwaukee County under the organization and charter of the latter society.

Mt. Sinai Hospital.—Mt. Sinai Hospital, conducted by the Jewish Hospital Association, corner Fourth and Walnut streets, Milwaukee, has been opened to patients.

Dr. Louis B. La Count.— Dr. Louis B. La Count, an old and prominent physician of Merrill, a graduate of Rush Medical College, and a veteran of the Civil War, died May 20th.

Anti-Expectoration Ordinance.— The Milwaukee City Council has favorably acted upon the anti-expectoration ordinance recommended by the Health Department.

Librarian of the Milwaukee Medical Society.— Dr. H. V. Ogden has resigned as librarian of the Milwaukee Medical Society, and Dr. A. W. Myers has been appointed to the vacancy.

Prof. Lorenz in Milwaukee.— It is announced that Prof. Lorenz, of Vienna, will favor Milwaukee with a visit June 13 and 14, and will conduct clinics at St. Joseph's and Trinity Hospitals.

THE LAW IN ITS RELATION TO MEDICINE.

By EDWIN S. MACK, A.M., LL.B.

The Shortcomings of Expert Testimony.

The long experience and great ability of the writer of the editorial articles on expert testimony in the May number of this magazine give his conclusions exceptional weight; and yet they fail to take into account some of the inherent difficulties of the problem which suggest themselves to a lawyer. The English common law is peculiar in its rules of evidence. They are not based on any clearly regulated logical system, but they are the product of tradition and they arise from peculiarities of the jury system.

The suggestion is made that experts should be questioned on the same state of facts. The difficulty is that one of the essential questions for the jury is the determination of what the facts are. Take a recent murder trial as an example. The defense maintained that the defendant had frequently had epileptic fits and had had an attack shortly before the time the crime was committed. The prosecution maintained that he had been perfectly well the day of the crime and had attended a place of amusement during the time the defense maintained he was ill at home. Now the judgment of an expert witness as to the mental condition of the defendant might vary greatly with the circumstances as to whether the defendant had had an epileptic fit on the day of the crime. The province of the jury was to decide the question whether or not the defendant had an epileptic fit at that time, and after fixing the facts in their own minds, to determine the question of sanity from the expert testimony. It may undoubtedly be urged that the system is absurd which requires an uneducated, untrained and inexperienced body of men to find a solution for complicated questions of fact, and at the same time apply to these facts technical medical testimony. The only answer is that the evil is an inevitable result of the jury system, and that trial by jury is worshiped as one of our most valuable traditions; and so long as the jury system is maintained, we shall have to continue the system of having our expert testimony applied to the facts that each particular party urges, instead of to predetermined facts stated by the court.

The remedy must be sought not in the method of submitting questions to experts but in the character of the experts who are brought to answer the questions. If the same experts were required to testify as to the hypotheses offered by both plaintiff and defendant, the de-

termination of the controversy would be greatly simplified. The result could be attained in one of two ways; either the court could appoint the experts and require them to testify as to hypothetical cases stated by each of the parties, or each of the parties could be permitted to call his own experts but with the restriction that each expert must be interrogated on the hypotheses of both parties. Either of these systems has shortcomings. Experts appointed by the court might frequently be men of inferior capacity and might utterly fail to consider theories which physicians under the stimulus of counsel employing them might discover. At the same time this comparatively small evil would be counterbalanced by the greater advantage that would arise from the impartial character of the experts. One of the worst evils we have now have to meet is the partisanship of expert witnesses. An expert is called to testify not with the purpose of obtaining his impartial scientific opinion but with the object of obtaining testimony to establish a given thesis. Before the trial the expert witness confers with his party's lawyer. He is usually presented only with the theory of facts on which his side depends; and he is in the company of men who think, talk and write to the one single purpose of establishing their side of the case. Thus there is every likelihood that by the time he takes the witness stand he will have become a decided partisan. Once on the witness stand he will probably be subjected to severe examination; and the inevitable effect of this will be to rouse him to greater positiveness in his judgments.

There is, however, another evil fully as great as that of the unconscious partisan bias of most expert witnesses, and that is the insufficiency of our tests of expert capacity. Were experts appointed by the court, we might eventually come to appoint only men skilled in the particular department of medicine involved in the case. As it is now any physician need testify only that he is a practitioner and has had some experience, and his evidence goes before the jury, whether his special qualifications be great or small. The ordinary jury make no distinction between men who all have the same right to call themselves "Doctor," and they have no basis on which to discriminate between the weight to be given the opinion of the most learned student and the guess of the most ignorant pretentious quack. It is difficult to prescribe any enforceable effective test of expert qualification. We have only to look at the kind of men who slip by our medical examiners to see how easy it would be to evade any rule. If the experts were to be named by the courts we could appeal to the discretion of our judges to see that only proper appointments were made.

Recent Cases.

In *Munz vs. Salt Lake City Railway Co.*, 75 Pac., 852, the Supreme Court of Utah had to deal with a case where a physician was sent by a street railway company to examine a passenger who had been injured. It was held that the relation between physician and the injured person was a confidential one and the physician could not testify as to the statements made to him.

In *Gillette vs. Tucker*, 65 N. E. Repy., 865, the Supreme Court of Ohio affirmed the rule that a physician not only must exercise due care in an operation, but that having assumed the case, he was bound to continue to treat the patient and exercise due care thereafter.

CORRESPONDENCE.

FOREIGN LETTER.

MEDICAL MEN ON THE SEA.

ON BOARD STEAMER IRENE, APRIL 11 TO 20, 1902, EN ROUTE TO THE INTERNATIONAL MEDICAL CONGRESS AT MADRID.

GIBRALTAR, April 20, 1902.

To the Editor of the Wisconsin Medical Journal:

DEAR SIR: After five days of somnolence induced by chloretone and the usual relaxing effects of *mal de mer*, I awoke at the Azores. Never in the goodly number of sea voyages that I have made, have I been so comfortable, that is to say, so little uncomfortable as on this trip. I ascribe the immunity to somewhat careful dieting for the two days previous to sailing, and to chloretone 0.30 every two or more hours, or sufficiently often to forestall the agonizing headache and vertigo of that form of sea sickness from which I usually suffer. I am about the ship and almost "acclimatized," and have had no chloretone to-day. On previous occasions, even the mildest trip, is to me a passage through purgatory. The ship doctor, Mandowsky, who, by the way, expects to come to Wisconsin with his English bride shortly, has likewise used chloretone with good results in a number of his seasick passengers. There seems to be no reaction of a disagreeable nature; indeed, I should be afraid of the formation of a habit, for the effect is distinctly agreeable.

With special pleasure have I noted that in this company Milwaukee is not spoken of especially as the town that has made a beverage famous, but as the home of *men*. I have been asked about many of

our professional men and others of our well-known citizens who have done something besides laying up the dollars.

There are about thirty of the medical profession on this steamship en route to the International Medical Congress which meets at Madrid from April 20th to 27th. The characteristics of some of our prominent men show strongly on ship board. First and most prominently known in our locality is Nicholas Senn. It is easy to see how he gets through such an amount of literary work; he comes aboard with a bundle of notes, and not only works away on these in his cabin, but has the ship doctor busy translating for him a portion of the day. His light reading on deck is an edition of Sabatier on Surgery, published in 1821 in the original French. Occasionally he swaps hunting or traveling stories with acquaintances, but is usually deep in his French author. Dr. Senn will read a paper before the Congress on "Surgery on the Battlefield." His experience with more than three thousand wounded in the Turco-Grecian and Spanish-American Wars, as well as his vast clinical and scientific experience all over the world, will make this most acceptable and interesting.

Dr. Howard Kelly, of Baltimore, is deeply immersed in the History of the Jews, upon which subject, I understand, he is preparing a book. He impresses one as a most devout and earnest Christian, and is said to carry his religious precepts even into his medical practice, not being satisfied—as was Ambrose Paré—with saying "Je tai operé que Dieu te guérierre." Dr. Kelly has been known for years to be an ardent evangelist, but it really seems to me that he now goes almost as far as the priest in proselyting his patients. Sunday services were held by him on the ship. All this may be for the best, for a man is seldom nearer his Maker than when he is ill. Dr. Kelly is preparing a new work on "Surgery of the Kidney."

Dr. R. Harvey Reed, formerly of Columbus, Ohio, now of Rock Springs, Wyoming, has a new and most interesting operation for floating kidney. He makes an anterior abdominal incision one and a half to two inches in length, replaces the kidney and fixes it in position by passing a double armed ligature of silkworm gut through the kidney and out through the back with two needles 5 to 7 inches in length, fixing it over the twelfth rib. The suture is removed on the tenth to fourteenth day, and in the twenty cases used has acted admirably. In two of these cases autopsies were obtained, (death from other causes) and in one an ovariotomy was afterwards made, the kidney in all three cases being found fixed in normal position. These needles are straight and round. Drs. Senn and Kelly are much interested and will try the operation.

Dr. G. V. I. Brown, of Milwaukee, is busy with his notes on "Surgery of the Mouth," and with plans for the medical and dental work of the St. Louis Exposition.

Among other notables are Dr. Ravogli, of Cincinnati, who has an article before the Congress on "Lymphadenoma in Syphilis," which is illustrated by a large number of photographs. Drs. Chas. B. Nancrede of Ann Arbor, A. E. MacDonald and Davidson H. Smith of New York are also with us.

Most of these gentlemen are ardent workers in the American Medical Association, and greatly regret the loss of the opportunity to be at the meeting in New Orleans in May, but one cannot eat his peach and have it, too, so we take the Spanish trip—expecting a warm reception, not, however, of the character we extended the Hidalgos several years ago.

H. V. WUERDEMANN.

XIV. INTERNATIONAL CONGRESS OF MEDICINE.

MADRID, April 30th, 1903.

I have deferred placing my impressions of the Congress on paper until after the affair was over. My impressions have been distinctly unfavorable, and comparisons with other medical congresses, more particularly the American Medical Association, are odious, and as odoriferous as are the streets and the common people.

I do not know of any American or Englishman, even though of high title, who has been at all satisfied with the so-called Spanish hospitality. In the first place a reduction of 50 per cent. was largely advertised by the officers of the Congress and the railroads throughout most of Europe, and yet physicians from England and France particularly have had much trouble in obtaining these reduced rates, which are undoubtedly granted, but with such an amount of red tape that many have preferred paying the regular rates to waiting for hours around some sub-official. For instance, at the station in France the tickets are not honored, but the intending traveler must go to the center of the city, miles away, and get some one at the head offices to countersign them; again at the Spanish frontier the officials of the Midi or Spanish company must be seen at their central offices. Further, the secretaries of each medical legation for each country had to countersign every ticket for their countrymen, and some—notably Dr. Brouardel of the French legation—protested that they were not clerks and could not certify to the correctness of any or all of their countrymen. Such red tape required a delay of 24 or more hours at one or more places for such delegates.

The American delegates were, however, well taken care of by the secretary, Dr. Huddleston, of New York. So far as the journey to Madrid was concerned, most of our 150 delegates and families obtained their billets and accommodations through Thos. Cook & Son, and thereby obviated the minor discomforts of the journey. We paid, however, for first-class accommodations, but did not obtain them, even in the several stops made at Sevilla for the purpose of seeing the Alcazar and Cathedral at Granada, the Alhambra, etc., though in some instances we obtained rooms in "first-class" hotels; the better rooms were not for us. In consequence of this many have left the Cook excursions and are proceeding home or traveling on their own account.

Madrid is a political center, somewhat larger than Milwaukee, and has no capacity for giving first-class lodging to the 6,000 delegates and families that attended. In consequence of this the six larger hotels were bought up long before by some agents, and exorbitant prices asked for rooms—such as 150 to 200 pesetas a day ($10.00 to $15.00). Many agents were, however, discomfited, as many delegates found rooms in private houses and in hotels that had not been bought up by speculators. The same conditions prevailed at the "alleged" bull fight given on Sunday (which is the proper day for such spectacles in Spain). I was offered a box, seating five people, for 5,000 pesetas (about $100.00), which ordinarily sells for about $5.00. It is remarkable that all the clerks at the library building, and even some of the doctors officially connected with the Congress, had these seats for sale at from five to ten times their actual value. It seems that the $20,000,000 we gave Spain for the purchase of the Philippines and the Antilles was only a sort of "laniche" and that they expect to make up something from the visitors to Spain.

All of this is especially regretable, as, after all, there was no great difficulty in obtaining rooms or securing seats for the opera or bull fight at more reasonable prices. Of the latter event, though given in honor of the "congressistas," there is nothing to be said in this correspondence except that it typified Spanish brutality, and few but those with Spanish blood or instincts are ever induced to attend more than their first bull fight.

This matter of "bulling the market" for room, etc., is, however, a serious question, and it is a pity that the representatives of the medical profession cannot meet without submitting to extortion from their "hosts."

Even the creation of a "Service des Logements" did little toward relieving this malfeasance, for two of our American doctors, who paid for lodgings in advance at this office, and who, being dissatisfied with

the rooms decided to go to others, were held up by the lessor with the aid of the police, as the room owner had not been paid by the Lodging Bureau. At last accounts the American minister was being called upon for intervention.

Despite the fact that Madrid contains many large public buildings which might well have been used for the purpose of holding our general and section meetings, the policy of "manana" prevailed as it ever does in Spain, and we were supposed to hold meetings in the Bibliotec ay Museos Nacionales, an enormous building begun in 1866 and partly finished in 1894. The statuary on the building, however, were of plaster and were being replaced by a sculptor in Carrara in Italy under the auspices of the late Señor Sagasta. This great statesman's Liberal party went to pieces, and the conservatives followed, headed by Señor Belmas, who had some trouble with the sculptor; in consequence of this the scaffolding is still on the building and we go in by the back way. Even then I am told that the celebrated head of the Library was induced to consent to the use of the building only by direct orders of the government; it was explained that the matter was connected with the international policy and that the government authorities were anxious to give their foreign guests a good reception. The building itself was sufficiently large for the purpose of housing all of the sixteen sections of the various committees, but improperly subdivided by temporary partitions, and the confusion and tumult at all times was frightful. The first three days, during which most of the registration took place, was worse than the floor of the stock exchanges during a financial flurry. Otherwise dignified professional men were crowded together for hours and struggled for an opportunity to get their credentials, which when obtained amounted to little. A plain common member had no show at all, a delegate from a National Medical Society got a ribbon and had a little better chance, while the more highly decorated delegates from the governments—especially if in military uniform and wearing several rows of insignia across their breasts, received various and many invitations to receptions, dinners, hospitals, etc. Although a plain civilian I was fortunate enough to have the highest class of credentials, and these together with the previous acquaintance of other members brought me *en rapport* with a number of Spanish gentlemen to whom I owe what little pleasant memory I have of Spain. One of these, Captain and Dr. Angel Morales Fernandez (oculist at the large military hospital, capacity 2,000, which I may describe later,) extended to me many courtesies and spent the better part of a day in conducting me through the eleven buildings with wards and laboratories which comprise the institution.

As regards entertainment for the ladies there was but little, a garden party at the young King's palace and a special entertainment at one of the theaters. As Prof. Dr. Fuchs of Vienna said, only the men are considered in Spain, and they are all gentlemen (caballeros) —even the beggars.

It was possible to hold only one general meeting, and because some of the sections met in the art gallery portion of the Library Building, in large corridors, with people tramping back and forth talking a Babel of more than a dozen languages, it was impossible to keep any semblance of order or to hear the speaker more than a few feet away. In the section I tried to attend (Ophthalmology) in which some four hundred were registered, the attendance dwindled down to a dozen Spaniards and Frenchmen, who did all the talking. Mr. Jessop of London and I were the only two English-speaking men in this section, and we were both much disgusted and quit long before each session terminated. The papers were, of course, of some scientific importance, but so far as our specialty goes there was nothing of any moment.

The paintings in the salons, where our sections met, were characteristic of the nation; battle, murder and bloody death, were the subjects of nearly all of them. I never saw such a "chamber of horrors." After the third day several of the sections removed to the building of the Faculty of Medicine, where—though not in such imposing surroundings and more difficult of access—at least we were removed from the madding crowds and could hear the speakers. The official languages were Spanish, French, Italian, German and English, named in order of preference. I spoke in our vernacular, and the secretary of the section asked me to write out my remarks in French or German, as it was so difficult to translate English into Spanish. In any case, it will make little difference, for the transactions will not be printed in a couple of years or so.

Those who may think this letter is but a series of "kicks" are referred to any American or Englishman who may have attended the Congress, and also to the London Lancet of April 25, 1903, whose special correspondent, Mr. Smith, I had the pleasure of meeting.

At the end the several sections were mainly attended by the officers and the readers of the papers listed for the day. Indeed, an author could not be sure when he would be called upon for his contribution and ofttimes had much trouble before he could get the opportunity to speak. Most of us gave up all idea of scientific work and put in our time sight-seeing and visiting the hospitals, of which there are a large number in Madrid, and a description of which I will give in my next letter.

H. V. WUERDEMANN.

CHICAGO LETTER.

The Value of the X-Rays.—Dr. W. A. Pusey, at a recent meeting of the Chicago Medical Society, read a paper on the therapeutic powers of the x-ray in skin diseases, in which he stated that the results of his experience with a large number of cases were very favorable. The list included almost every disease in the skin category.

Report of Children's Hospital Society.—In his report of the investigating committee of the Children's Hospital Society Dr. Abt announced that no children's ward or hospital had been constructed with the best knowledge of hospital sanitation. Out of twenty-seven institutions only eighteen maintained wards for children. The majority of these are constantly overcrowded and have insufficient air-space and deficient ventilation. Only one hospital—the Cook County—admitted contagious cases, and there was a striking lack of provision for such cases arising in the hospitals. A hospital for the exclusive care of children was advocated.

BOSTON MEDICAL LIBRARY SEP 23 1904

Internships in Cook County Hospital.—Examinations held April 17th resulted as follows: Rush Medical College secured six places and the alternates; Northwestern Medical College, seven places; and the University of Illinois, three places. Leon Block of Rush Medical College made first place.

Meeting of the Illinois Medical Society.— During April a very successful meeting of the Illinois Medical Society was held in Chicago. Numerous papers were read before large and representative audiences. Dr. Carl E. Black, of Jacksonville, was elected president, and it was decided to hold the next meeting at Bloomington.

Pneumonia Still Prevalent and Fatal.—The bulletin of the city health department for April calls attention to the fact that of a total of 2,628 deaths for the month, 604 were caused by pneumonia. This means an increase of 41 per cent. over April, 1902.

Prof. Mikulicz Visits Chicago.—Dr. Johann von Mikulicz, professor of surgery in the University of Breslau, visited Chicago and held a clinic at Mercy Hospital. He was introduced by Dr. Murphy, who also acted as interpreter. The members of the Illinois Medical Association had the fortunate opportunity to witness the distinguished professor operate on a case of inguinal hernia and also one of cholelithiasis.

Presbyterian Hospital School for Nurses.— A new school for nurses has been established at the Presbyterian Hospital. It is planned to have a higher standard than has been adopted by any other hospital school in this country. The educational supervision has been entrusted to the faculty of Rush Medical College. The leading features of the new school are the following:

1. The minimum age of admission is twenty and the maximum thirty.
2. Those entering the school must have a high-school education. Prefer-

ence will always be given to those who have spent one or more years in college work.

3. A moderate tuition fee must be paid by all students.

4. The period of training is three and a half years. During the first six months pupils do not enter the hospital at all, but spend their time in laboratory and dispensary work.

5. The number of nurses employed shall be sufficient to prevent overworking of individuals and to insure thoroughness in education.

New Hospital for Consumptives.— St. Ann is the name of a new hospital for consumptives, which is the first of its kind to be established in Chicago. St. Ann's was needed, and we need more such sanitaria to aid us in our war against the dreaded disease, which carries off so large a per cent. of useful members of society in the prime of life.

Plan for Care of Children.— New separate buildings for the care of sick children and a building for contagious cases only are in course of construction on the Cook County Hospital grounds. They are to be roomy and elaborately equipped.

Fresh Milk for the Babies.— Milk-dealers are being severely criticized for their system of one delivery daily, and a strong effort is being made to have two deliveries of fresh, pure milk every day. All such movements are commendable, for they must surely result in the saving of hundreds of babies, whose lives are at the mercy of the milkman.

New Head of the Dunning Institution.— Dr. V. H. Podstata succeeded Dr. Neeley as superintendent of Dunning on June 1st.

Courses for Practitioners.—Rush Medical College has made provision for a number of courses of unusual interest to practitioners, especially for those who desire to enter upon the work of a specialty. These courses are repeated every three months of the year. (M. M. P.)

A Case of Spasmodic Torticollis Successfully Treated by Hypodermic Injections of Atropine.—CHAS. S. POTTS (*University of Pennsylvania Medical Bulletin*, March, 1903). The patient, aged 30 male, was incapacitated by the contractures. The spasms were clonic and were made worse by any muscular movement whatsoever. No improvement was noticeable on 1-100 grain hydrobromate of hyoscine, with 15 grains of iodide of potash, given three times daily, and treatment was changed to 1-200 grain of atropine injected into the sterno-mastoid daily, alternating with the muscles of the back of the neck. The dose was gradually increased to 1-45 grain. Massage and electricity were also given. He was comparatively well for four months, when the affection returned, but after another course of treatment he was able to return to his work. (H. E. D.)

THE STATE MEDICAL SOCIETY OF WISCONSIN.

ORGANIZED 1841.

Officers for 1903-1904.

F. E. WALBRIDGE, Milwaukee, President.
JAMES MILLS, Janesville, 1st Vice-Pres. C. C. GRATIOT, Shullsburg, 2nd Vice-Pres.
CHAS. S. SHELDON, Madison, Secretary. S. S. HALL, Ripon, Treasurer.

Provisional Councilors.

1st Dist., J. G. Meachem, - - - - Racine.
2nd Dist., J. S. Walbridge, - - - - Berlin.
3rd Dist., C. S. Smith, - - - - - Elroy.
4th and 5th Dist., G. A. Kletzsch, - Milwaukee.
6th Dist., H. Reineking, - - - Sheboygan.
7th Dist., W. T. Sarles, - - - - Sparta
8th Dist., J. F. Pritchard. - - Manitowoc.
9th Dist., T. J. Redelings, - - Marinette.
10th Dist., J. M. Dodd, - - - - Ashland.
11th Dist., E. L. Boothby, - - - Hammond.

Next Annual Session, Milwaukee, June, 1904.

The Wisconsin Medical Journal, Official Organ.

SOCIETY PROCEEDINGS.

STATE MEDICAL SOCIETY OF WISCONSIN.

Fifty-Seventh Annual Meeting. Milwaukee, June 3, 4, 5, 1903.

The Fifty-seventh Annual Meeting of the State Medical Society of Wisconsin was called to order at the Plankinton House, Milwaukee, June 3, 1903, at 11:25 A. M., by the President, J. V. R. Lyman.

The attendance was large.

The important matter of the morning session was presentation of the report of the Committee on Reorganization, by Dr. J. F. Pritchard.

Dr. Pritchard said that the committee had but little to add to its preliminary report heretofore presented. The plan furnished by the American Medical Association was adopted by the committee with some changes suggested by Dr. McCormick, who states that the improved plan will be adopted by the American Medical Association as its model.

By adoption of the proposed constitution and by-laws, all the machinery of the new plan will be in order for the session of 1904.

The committee suggested that the location or formulation of the Councillor Districts might be done by the incoming president.

The committee made no recommendation as to the manner of

publication of the proceedings, except that the question be left to the Council.

Dr. Pritchard then read the proposed Constitution and By-Laws, and an adjournment was taken until 2 P. M.

Proceedings Wednesday Afternoon.

The report of the Reorganization Committee was made a special order of business for 4 P. M.

HEMORRHAGE INTO THE CRANIAL CAVITY FOLLOWING INJURY TO THE SKULL.

Dr. Charles H. Lemon, of Milwaukee, read a paper on "Hemorrhage into the Cranial Cavity following Injury to the Skull," which was in substance as follows:

In injuries to the skull, especially those caused by a fall from a height, we sometimes find serious intra-cranial disturbance without demonstrable hemorrhage within the cranial cavity. It is the experience of those who have seen many of these cases that some cases are allowed to die under a diagnosis of concussion of the brain which might possibly have been saved if subjected to operative procedure. There is a pathological condition of the brain following trauma that is oftentimes overlooked. We may have and we frequently do have contusion of the brain itself and its membranes, and, as a result of that contusion, we have edema of the brain causing intracranial pressure of a fatal character which might be avoided by trephining and drainage. We are expecting in the brain a power of resorption that we do not expect in other tissues of the body. We seem to have lost sight of the fact, that in the arrest of a fall, when the delicate structure of the brain is contused by its sudden sharp contact with its bony envelop, it must undergo the same pathological process with all its attendant inflammatory changes that other soft tissues, more favorably situated for the purpose of expansion, similarly injured, undergo.

In order to give these patients every possible chance for recovery, the skull should be opened for the purpose of relieving tension, and—by providing free drainage—afford the brain the greatest possible room for expansion.

Discussion.

DR. A. J. BURGESS, of Milwaukee, called attention to the fact that it was the cases where there is no apparent fracture or laceration which had been neglected, but which could frequently be saved, by relieving intracranial pressure.

DR. W. H. EARLFS, of Milwaukee, endorsed the paper fully. He said that where there was any pronounced suspicion of intracranial pressure it is the duty of the surgeon to relieve it by operative procedure, for it is as safe to enter the brain cavity to-day as it is to enter the abdominal cavity.

DR. A. H. LEVINGS, of Milwaukee, mentioned cases of rupture of the branch of the middle cerebral artery from injury, which is denied by some; also that fatal head injuries are not always due to hemorrhage; and that contusion or laceration of the brain itself can never be put under control by operative means. Progressive edema is rare.

DR. O. THIENHAUS, of Milwaukee, presented a case of depression of the skull in an infant, following version and extraction from a rachitic and much contracted pelvis.

DR. F. SHIMONEK, of Milwaukee, called attention to the danger of septic infection of the meninges from injections into the ear in cases of fracture of the middle fossa of the skull, where communication is made with the canal of the ear.

DR. WILHELM BECKER deplored the fact that operation for cerebral hemorrhage is not more frequently done immediately to relieve the otherwise fatal edema.

RETRODISPLACEMENT OF THE UTERUS.

Dr. G. A. Kletzsch, of Milwaukee, then read a paper on the subject of "Retrodisplacement of the Uterus," covering the field of prophylaxis.

Discussion.

DR. A. J. PULS, of Milwaukee, referred to the surgical features and said that many cases of retroversion and lateral displacement could be cured by local treatment, but where inflammatory conditions have set in and the uterus becomes flexed by means of the local peritonitis, an operation is necessary.

DR. F. SHIMONEK, of Milwaukee, drew a distinction between retroflection and retroversion. The latter cases are usually not the result of infection, but of mechanical forces causing sudden displacement. Retroflection, however, indicates a pathological condition of the organ itself. Treatment of each should be different. The pessary is often proper treatment in retroversion, but constitutional and local treatments are of primary importance. In retroflection, a surgical treatment is important after the effects of inflammation have subsided.

DR. O. THIENHAUS, of Milwaukee, advocated the vaginal route in preference to the abdominal operation.

DR. A. J. BURGESS, of Milwaukee, condemned local treatment by intrauterine applications of various kinds; and spoke of the necessity of fresh air and exercise.

DR. WILLIAM E. FAIRFIELD, of Green Bay, said that retroversion was frequently caused in puerperants by lying on the back, bandaging and giving anodynes which cause constipation after labor; lack of proper drainage causing infection, subinvolution and retroversion.

DR. I. D. MISHOFF, of Milwaukee, called attention to the advantages of electrical treatment of retroversion and retroflection.

The President then presented his address, giving a history of the Society and recounting the advantages of the proposed reorganization.

THE SCIENTIFIC AND PRACTICAL VALUE OF BACTERIOLOGICAL EXAMINATIONS OF THE BLOOD DURING LIFE.

Dr. L. Hektoen, Professor of Pathology, Rush Medical College, Chicago, presented a paper on the "Scientific and Practical Value of Bacteriological Examinations of the Blood during Life."

After dwelling upon the technic of and the results so far obtained in various diseases with bacteriological cultures of the blood during life, the following conclusions were drawn: 1st. Bacteriological examination of the blood by modern methods has proven of great scientific and practical value in the so-called septic diseases or septicemia, in pneumonia, and especially in typhoid and paratyphoid fevers. 2nd. In the typhoidal diseases, blood cultures constitute the best means of diagnosis in the early stages, and that is the period when definite diagnosis is most difficult, yet most desirable. 3rd. Etiologic diagnosis, that is, recognition of the exact disease present, demands the application to practical medicine of laboratory methods, and henceforth the physician's work will require more and more the constant and intelligent use of the facilities of a well equipped laboratory.

Dr. Hektoen's paper is based upon a consideration of the most important literature upon the subject and upon the results of extensive original investigations by himself and by others in the laboratory of Rush Medical College and the Memorial Institute for Infectious Diseases.

Discussion.

PROFESSOR J. B. HERRICK, of Chicago, said: 1. Bacteriologic examination of the blood should become general in view of the probability that there will come a specific therapy for infectious diseases and practitioners should be ready and know how to apply the specific when it is offered.

2. Such examination must be practised carefully and thoroughly that we may better understand the clinical course of these diseases.

3. This examination enables us to make definite etiological diagnoses.

4. This method is feasible, the technic is simple and it has come to stay.

5. The system of coöperation would enable a rural laboratory to be maintained in small towns. The laboratory work must, of course, be controlled and interpreted by clinical observation. The day of the general practitioner is not passing away because of laboratories.

DR. FRED. R. WEBER, of Milwaukee, discussed the growth of bacteriology and spoke of the danger in making bacteriologic examinations of not taking a sufficiently large quantity of blood, and of not making the culture with sufficient rapidity to avoid the destruction of the organism before it can be examined.

THE DIAGNOSIS OF HYSTERIA.

Hugh T. Patrick, Associate Professor of Clinical Neurology, Northwestern University Medical School, Chicago, spoke on the subject of the "Diagnosis of Hysteria."

He said: It is important to diagnose hysterical anesthesia by careful examination. There are three striking characteristics of this

functional condition: 1, Distribution; 2, its sharp limitation or border, and 3, the rapid shifting of this limitation.

The area of anesthesia of organic origin, on the other hand, does not shift but shades gradually to sensation. The anesthesia of the hysterical patient being a functional or psychic difficulty, the patient is utterly unable to remember the location of the area of anesthesia. The same principle of shifting applies to hysterical hyperesthesia.

Discussion.

DR. W. F. BECKER, of Milwaukee, said: The presence or absence of hysterical temperament is of little importance in making the diagnosis. Where we get a history of hysterical seizures the diagnosis is easy.

The subject of reorganization was then taken up, and Dr. George H. Simmons, Secretary of the American Medical Association, addressed the Society. He explained the advantages of uniformity of organization on the county plan, and said that the American Medical Association was asking the state societies to form one compact organization and to federate with the American Medical Association in a strong union which could accomplish important results in increasing membership, lessening expense, securing necessary legislation, and in the general advancement of the profession. The principle of the proposed changes is that membership in the county society carries with it membership in the state society.

The Constitution and By-Laws were adopted as printed except that the name of the State Medical Society of Wisconsin was retained in place of the one proposed by the committee, the new Constitution and By-Laws to go into effect at the close of the present annual session.

A committee of ten with the powers of the Council under the new Constitution, was appointed to act as an organization for the ensuing year, the President, Secretary and Treasurer to be members of the committee *ex-officio,* in addition to the ten.

The committee consisted of Drs. J. F. Pritchard, J. S. Walbridge, G. A. Kletzsch, Herman Reineking, W. T. Sarles, T. J. Redelings, J. M. Dodd, Dr. Boothby, C. S. Smith and J. G. Meachem.

Adjourned.

Proceedings Thursday, June 4, 1903.

MANAGEMENT OF THE MOTHER DURING CHILD-BED PERIOD.

Dr. A. D. Gibson, of Park Falls, read a paper on the "Management of the Mother during Child-bed Period," in substance as follows:

A case of confinement is treated lightly as a routine occurrence by the obstetrician, but is looked forward to with the gravest fears by the anxious mother.

There is scarcely any condition that will not permit the toilet of the woman to immediately follow parturition.

The abdominal binder and post-partum douche are heirlooms of the past and should be discountenanced. Parturition is a physiologic and not a pathologic condition. Therefore, why interfere with nature? The catheter should be used only as a last resort. The mother should not be deprived of an abundance of good nourishing food.

Do not withhold the child from the breast. It is not necessary to defer the administration of laxatives until the third day. The patient may be permitted to move freely in bed. It is not sitting up too early but rather supporting the weight on the feet too soon that is injurious. At the end of six weeks there should not remain a single symptom referable to the pelvic organs. A routine examination is advisable at this time.

Discussion.

DR. G. E. BALDWIN, of Dartford, said that the secret of the comfort during this period is cleanliness. Breasts and nipples cannot be cleansed too often, thus avoiding fissures.

SHORTCOMINGS OF THE PHYSICIAN, PARTICULARLY IN HIS RELATION TO THE STATE AND HYGIENE.

Dr. A. F. Fuchs, of Loyal, then read a paper on "Shortcomings of the Physician, Particularly in his Relation to the State and Hygiene."

Dr. Fuchs' paper was a sort of satire. He scored the whole profession, the specialists, college professors, and medical grafters in particular, and the men who persistently come forward with opinions for the medical and secular press, on subjects about which they know nothing.

Discussion.

DR. RALPH ELMERGREEN, of Milwaukee, urged the physician to live up to his duties as a citizen and take a more active interest in politics.

DR. HERMAN GASSER, of Platteville, thought Dr. Fuchs' ideas were a little too advanced. The possibilities of life in the United States were greater than anywhere else.

ANNUAL ADDRESS IN MEDICINE. THE DIAGNOSIS AND TREATMENT OF NEPHRITIS.

Arthur R. Edwards, Professor of Therapeutics, Northwestern University Medical School, Chicago, presented the Annual Address in Medicine on the "Diagnosis and Treatment of Nephritis," referring particularly to certain atypical forms of the disease.

INDIGESTION—ITS CAUSES AND EFFECTS.

Dr. H. B. Sears, of Beaver Dam, read a paper on "Indigestion, a few of its Causes and a few of its Effects."

SEMILUNAR CARTILAGES, THEIR ANATOMY AND SURGERY.

Dr. H. A. Sifton, of Milwaukee, read a paper on "Semilunar Cartilages, their Anatomy and Surgery."

Dr. Sifton described the proper treatment of injuries or displacements of the semilunar cartilages, including reduction, and where indicated, operation. These cartilages can be removed without damaging the function of the joint.

Discussion.

DR. A. H. LEVINGS, of Milwaukee, called attention to the fact that this condition must be differentiated from sprain. In sprain you never get the snap, the locking of the joint, protuberance, node or vacant place at the site of the cartilage. Differentiation must also be made from loose or floating cartilages.

THE SEQUELAE OF ADENOIDS.

Dr. C. D. Conkey, of West Superior, then read a paper on the "Sequelæ of Adenoids."

He said: At the age of puberty adenoids disappear from the throat in the great majority of cases. With their disappearance nature often fails to bring relief to the organs of the body unduly influenced by their presence. Certain sequelæ persist for a time and others through life.

The most marked sequela is the deformity of the facial bones and soft parts covering them, producing the characteristic adenoid facial expression. This deformity is very persistent and only improves with a corresponding re-establishment of nasal respiration. If nasal respiration is not re-established, the deformity will persist through life. Another sequela is mouth breathing dependent upon two causes, one due to the narrowed nasal spaces that from non-use failed to develop during the adenoid period of life, and the other depending upon the habit acquired during the period of forced mouth breathing, and which still persists after the disappearance of the growth.

Other sequelæ are chronic nasal catarrh, chronic catarrh of the pharynx, larynx and bronchi, and chronic aural disease. The paper urged the early removal of adenoids and the correction of the habit of mouth breathing, a vicious habit which prevents a return to health of the structures involved.

Discussion.

DR. H. B. HITZ, of Milwaukee, said that early recognition and removal of adenoids is important. Recurrence is rare if the adenoids are properly removed, which should usually be done under an anesthetic.

IMMUNITY AND ITS RELATION TO SURGICAL PATHOLOGY.

Dr. J. M. Dodd, of Ashland, then read a paper on "Immunity and its Relation to Surgical Pathology."

He said that the presence of invading germs stimulates the production of the immunizing principle. Pathologists say that the immunizing priniciple is derived from the cells, resides in the cells, and its power exerted by the phagocytes, while others claim that it is antitoxic and is present in the blood serum and tissue fluids. Both theories are probably correct. This principle is, however, a variable quality.

A clear understanding of the principles of immunity will point the way to successful diagnosis and treatment of all diseased conditions, but the problem of course has not been solved. We look to physiological chemistry to furnish a solution ultimately, but at present we cannot always foretell the result of our procedures, because the estimation of vital resistance is not yet possible.

SIGNIFICANCE OF PERFORATING WOUNDS OF THE EYEBALL.

Dr. J. A. Bach, of Milwaukee, presented a paper on the "Significance of Perforating Wounds of the Eyeball."

He said, that if properly made by the surgeon such wounds should not be dangerous. Accidental wounds of the eyeball are dangerous, but all possible sources of ciliary irritation ought to be speedily removed so as to lessen the stimulus to the production of plastic exudate. Prolapses should be removed at once. Every means must be used to reduce irritation, for if exudation is allowed to proceed for even a few days, all after treatment may be of no avail.

PROSTATECTOMY.

Dr. T. W. Nuzum, of Brodhead, then read a paper on "Prostatectomy."

He claimed that prostatectomy is an operation designed to add many years of comfort to many patients; that the perineal route is generally preferable; that the operation is warranted in men of advanced age; that there should be preparatory treatment lasting several days in septic cases; that the horse-shoe incision is preferable to the median, as the field is in plainer sight; the danger lies in sclerosed arteries and hemorrhage; the mortality is small and will be further reduced with improved technic.

Discussion.

DR. D. J. HAYES, of Milwaukee, said that these cases usually come too late. An early prostatectomy is more successful than a late one, but it is very difficult to get the early cases. The Bottini operation is not desirable.

POST-MORTEM DEGENERATION OF THE PANCREAS.

Dr. Wilhelm F. Becker, of Milwaukee, presented a paper on "Post-mortem Degeneration of the Pancreas."

Post-mortem signs indicating the time which has elapsed since the death of an individual, are exceedingly vague and unreliable. Microscopic examination of tissues seems to have been neglected as a

means of establishing the time in question. There are advantages in using the pancreas as an indicator. A study was made of a number of pancreata in men dead different periods of time. Experiments were made on dogs' pancreas. Shortcomings of the methods are stated, and conclusions drawn. The paper was illustrated by drawings and photomicrographs.

Discussion.

DR. HERMAN REINEKING, of Sheboygan, said that it will require much investigation to determine the rapidity of post-mortem degeneration, and he feared that the same conditions which make the older signs indefinite will prevail to a greater or less degree in the histological changes of the internal organs.

ALBUMINURIA IN THE APPARENTLY HEALTHY.

Dr. W. H. Washburn, of Milwaukee, read a paper on "Albuminuria in the Apparently Healthy."

This paper touches, only in a very cursory manner, upon the etiology, diagnosis and pathogenesis of albuminuria, but presents the writer's observations and records of more than 200 cases. These cases have had a history of from one to fifteen years and the mortality among them has been such as to lead to the conclusion that the prognosis in cases where the albuminuria is the only evidence of disease, is not as unfavorable as has latterly been supposed.

The paper closes with a brief consideration of the subject of treatment, and the writer concludes both from his own experience and that of others, that there is no line of treatment hitherto suggested that produces any influence over the incidence of the albumin.

Discussion.

DR. C. E. ALBRIGHT, of Milwaukee, said that an examination of 225 cases convinced him that the albumin in no single case occurred under strictly normal conditions.

ANNUAL ADDRESS IN SURGERY. SURGERY OF THE STOMACH.

Dr. William J. Mayo, of Rochester, Minn., then read the Annual Address in Surgery on "Surgery of the Stomach."

The Society passed a resolution condemning the late massacre of Jews in Russia as a heinous crime unparalled in the history of civilization.

ETHYL CHLORIDE AS A GENERAL ANESTHETIC.

Dr. F. Pfister, of Milwaukee, read a paper on the subject of "Ethyl Chloride as a General Anesthetic."

He said it was safer than either ether or chloroform and never causes vomiting or headache. Its use is preferable in minor surgery and in younger subjects. Excitement and cyanosis are absent.

DIAGNOSIS AND TREATMENT OF INFLAMMATORY CONDITIONS OF THE EXTERNAL EAR.

Dr. G. E. Seaman, of Milwaukee, read a paper on the subject of "Diagnosis and Treatment of some of the Inflammatory Conditions of the External Ear."

Dr. Seaman did not discuss all of the inflammatory diseases of the external ear but confined his remarks to furunculosis, abscesses, diffuse dermatitis and eczema, touching briefly upon the symptomatology and diagnosis of each condition, and laying down the lines of treatment which in his experience have proven beneficial, especially mentioning the use of the oil of ergot in eczematous conditions.

Discussion.

DR. CONKEY, of West Superior, called attention to the danger of mistaken diagnosis for diseases of the middle ear.

DR. G. A. HEIDNER called attention to the necessity of general, as well as local treatment in furunculosis in the external auditory canal.

THE EARLY TREATMENT OF THE INFANT.

Dr. Bertha E. Thomson, of Oshkosh, read a paper on the subject of "Infant Feeding," in substance as follows:

In Germany the records show 8 per cent. of deaths among breast-fed children as against 51 per cent. among artificially fed children. Excess of proteids in milk gives more trouble than anything else. Clean raw milk is better than sterilized or Pasteurized milk.

Discussion.

DR. J. R. BARNETT, of Neenah, said that condensed milk is a good substitute for mother's milk.

DR. L. BOORSE, of Milwaukee, said that even trained nurses are ignorant of the proper method of caring for the new-born. "Inanition fever," so-called, must be guarded against. Regular habits of nursing are very important. Regular periods of feeding are very important when substitute foods are used.

Proceedings Friday, June 5, 1903.

The Society passed a resolution making a contract with the Wisconsin Medical Journal to publish the transactions and furnish a copy of the journal monthly to each member at a price not to exceed $1 a year each. The Secretary of the Society is made Associate Editor of the Journal and is to have control over the matters published pertaining to the business of the State Society.

SEPTAL DEFLECTIONS—THEIR CONSEQUENCE AND TREATMENT.

Dr. F. T. Nye, of Milwaukee, read a paper on "Septal Deflections, their Consequence and Treatment."

These consequences are (a) Imperfect respiratory functions re-

sulting in phonotory or olfactory disturbances. (b) Pharyngeal and laryngeal diseases, and (c) Imperfect drainage into the nasal passage. The otitic complications are most to be dreaded. The principles to be applied for relief are surgical, involving depressions of the floor, removal of excess of cartilaginous or bony tissue, to replace the septum in its normal position and to facilitate its maintenance in that position.

Discussion.

DR. SEAMAN, of Milwaukee, said that he did not believe that congenital mal-development is responsible for the largest number of cases of septal deflection. The nose should not be operated on so long as it is unobstructed. In operating straighten the septum in the simplest possible manner. Specially devised instruments are not always necessary. Cleanliness should be thorough, or infection frequently follows. Local anesthesia is preferable where possible.

DR. H. B. HITZ, of Milwaukee, said that he agreed with Dr. Seaman that congenital deformity is extremely rare. On operation for deflected septum cocaine solution should be applied with the probe. Breathing against a mirror is an easy means of diagnosis.

THE PRACTICE OF OBSTETRICS.

Dr. E. F. Fish, of Milwaukee, read a paper on the "Practice of Obstetrics."

The writer in a general way considers this branch of medicine and claims that the practice of obstetrics is a neglected specialty. He claims that in the cities at least it is relegated to the midwives and younger practitioners in medicine, and gives as his reason that the pay is not commensurate with the amount of work involved; as a consequence the older men in the profession avoid the work as much as possible. He urges as a remedy the raising of the standard of education and the practical as well as theoretical education of the student in this line. He urges physicians to take fewer cases and demand better pay. The laity should be taught to engage their physician weeks and even months in advance. The physician should call on his patient, make her acquaintance, ascertain the condition of the pelvis, examine the kidneys and by external manipulation learn the position of the child. He should be clean about himself and his work and properly prepare his patient, and thus favorably impress her and her relatives. He next considers douches and opposed their use unless there is some decided indication, such as gonorrhea. He prefers scrubbing of the vagina if anything in this line is called for; he advocates the use of rubber gloves and is in favor of making enough examinations to arrive at a diagnosis and assist the mother as much as possible; he favors the use of forceps in selected cases. Lacerations of the soft parts must be repaired at once; not so lacerations of the cervix except when the tear involves the circular artery. Ordinary cervical lacerations require such skill when repaired directly after childbirth that the general practitioner is unable and not expected to attempt their repair. The after care of the mother is considered. Sepsis is given considerable attention. In puerperal sepsis he does not use the

curette; he uses drainage and intrauterine douches of 50 per cent. alcohol, about once in four hours. A double drainage tube is placed in the uterus and left there from three to ten days, and the nurse flushes it every four hours with alcohol. The constitutional treatment consists of strychnine, quinine, whiskey, other heart stimulants, salt infusion, etc., and lavage of the stomach in case of nausea, and rectal alimentation.

Formaldehyde in the treatment of sepsis is considered and its use is not advocated. The weight of argument is against it. Any antiseptic strong enough to kill the streptococcus will destroy the blood. Antistreptococcic serum is mentioned but not advocated, as its use is still in the experimental stage.

Discussion.

DR. J. T. SCOLLARD, of Milwaukee, argued strongly against meddlesome interference on the part of incompetent midwives, and against too frequent internal examinations and too early and unnecessary operative interference on the part of physicians.

DR. W. B. HILL, of Milwaukee, said that he does not object to digital examinations as a means of determining the exact condition of affairs. Among patients who live in bad surroundings there appears to be an acquired immunity to infection. Antistreptococcus serum is effective in cases of toxinemia from the streptococcus.

THE DEPURATIVE FUNCTIONS OF ORGANS.

Dr. R. C. Brown, of Milwaukee, read a paper on the subject of "Depurative or Protective Functions of Organs."

He said that the depurative function is one of the original properties of the simple cell and that this property was acquired by the organs and by the body as a whole. In the progress of evolution groups of cells become specialized to perform certain functions, yet each individual cell retains its original power of self-protection. Inflammation is nature's response to outside pathogenic agents and the symptoms of disease are protective in their inception, being evidences of nature's endeavor to rid herself of the pathogenic cause; that the functions of organs are complex and not simple and the depurative function is a property of many organs: that the organs are assisted in their depurative function by the lymphatic system, the circulatory system and the nervous system.

He shows that the body as a whole is prepared to resist infection, as is evident by the manner in which the natural openings of the body are guarded, and gives for example the entrance to the respiratory tract. He calls attention to the fact that follicular tonsillitis may be evidence of depurative action and that a specific microbe, such as that of diphtheria, may set up a tonsillitis and the clinical symptoms of diphtheria may not be present.

He mentions the varied symptoms that may arise through the toxin of disease being eliminated by different organs and how the body suffers if the depurative function of an organ is interfered with.

He thinks the consideration of the depurative function is of great importance in studying the Etiology of Disease and that treatment should not be directed so much to the combating of symptoms as to the assistance of nature in her protective function.

MYOMECTOMY OF UTERINE FIBROIDS.

Dr. A. J. Puls, of Milwaukee, read a paper on "Myomectomy of Uterine Fibroids."

He said that it should be our aim to preserve the healthy tissues and remove only the degenerated or disintegrated parts. Myomectomy may therefore be substituted for the extirpation of the uterus wherever sufficient healthy uterine tissue can be safely left.

SURGICAL PROGRESS.

Dr. W. H. Earles, of Milwaukee, read a paper on "Surgical Progress."

Progress has been made in almost every branch of surgery. It has been shown that many gastric ulcers are amenable to operative procedure. Excision of the gall bladder is often better than mere drainage. The hopes inspired by reports of x-ray treatment of carcinoma are being dispelled by clinical statistics. The special orthopedic work of Dr. Lorenz is followed by functional improvement at least.

MANIFESTATIONS OF RHEUMATISM IN INFANCY AND EARLY CHILDHOOD.

Dr. Arthur T. Holbrook, of Milwaukee, then read a paper on "Manifestations of Rheumatism in Infancy and Early Childhood."

He emphasized the following points: The lack of a distinct understanding of what rheumatism really is; the frequency with which rheumatism in children is overlooked, because of peculiar symptomatology; the great importance of an accurate diagnosis, because of sequelæ. After reviewing the theories of etiology and the work of Wasserman, Malkoff, Westphal and Singer, the conclusion is entirely justified that rheumatism is an infectious disease, caused by microbic invasion probably of a streptococcus, through tonsils, digestive and respiratory tracts, germs and toxins developing and finding their way to serous cavities and to joints by predilection, and setting up an inflammatory process.

Rheumatism in children does not follow the adult type of disease. The temperature is usually slight and profuse perspiration is absent, the joint affections are oftentimes nothing more than slight stiffness and tenderness, and may be entirely overlooked or confused with "growing pains," bruises, etc.

Heart complications accompany or follow rheumatism in children much more constantly than in adults. It is estimated that 83 per cent., between 1 and 10 years, suffer heart lesions. Inasmuch as the severity of the heart lesion bears no constant relation to the severity

of the rheumatic attack in children, the importance of appreciating the slightest manifestation of rheumatism is evident.

Discussion.

DR. L. BOORSE, of Milwaukee, said the etiological factor of this disease has not yet been accurately determined. Early diagnosis and treatment are important. Endocarditis is a frequent complication. Salicylates have a specific as well as an anodyne effect.

DR. A. W. GRAY, of Milwaukee, mentioned the insidiousness of the heart symptoms.

DR. I. D. MISHOFF, of Milwaukee, said the disease was not inherited, but that a patient might have a predisposition to it, and that it was caused by bad surroundings.

DR. H. B. SEARS, of Beaver Dam, said that nutritional defects should be especially considered. Withholding starches and sugars is not an important factor.

DR. S. S. HALL, of Ripon, said that we know little more about the etiology of the disease than in the past, but we have improved in our treatment.

DR. C. S. SHELDON, of Madison, advised the use of aspirin.

DR. G. J. KAUMHEIMER, of Milwaukee, thought the lack of effect in the use of salicylates was because too small doses were used.

DIABETES.

Dr. W. H. Neilson, of Milwaukee, read a paper on "Diabetes Mellitus."

He said it is a disease in which there is interference with the consumption of sugar; this is due to the absence in the blood of the glycolytic enzyme. Evidence is accumulating in favor of the islands of Langerhans as the producers of this enzyme, and that their invasion and destruction is the constant pathologic entity. The treatment is that which will best improve nutrition and not tax the carbo-hydrate consuming powers.

CAESARIAN SECTION.

Dr. J. C. Cutler, of Verona, read a paper in which he reported a case of "Caesarian Section."

Milwaukee was chosen as the next place of meeting.

The election of officers resulted as follows:

Dr. F. E. Walbridge, Milwaukee, President; Dr. James Mills, Janesville, First Vice-President; Dr. C. C. Gratiot, Shullsburg, Second Vice-President; Dr. Charles S. Sheldon, Madison, Secretary; Dr. Sidney S. Hall, Ripon, Treasurer.

Dr. Edward E. Evans, La Crosse, Delegate to American Medical Association.

Adjourned.

MEETING OF THE PROVISIONAL COUNCIL.

June 5th, 1903.

A meeting of the Provisional Council of the State Medical Society of Wisconsin was held at the Plankinton House, Milwaukee, June 5, at 3:30 p. m. There were present Pres. F. E. Walbridge, Secy. C. S. Sheldon, Treas. S. S. Hall, and the following Councilors: Dr. W. T. Sarles of Sparta, Dr. J. S Walbridge of Berlin, Dr. Herman Reineking of Sheboygan, Dr. T. J. Redelings of Marinette, Dr. J. M. Dodd of Ashland, Dr. E. L. Boothby of Hammond, and Dr. G. A. Kletzsch of Milwaukee.

The State was divided into 11 Councilor districts corresponding with the present Congressional districts with the Councilors for each as follows: 1st, Dr. J. G. Meachem of Racine; 2nd, Dr. J. S. Walbridge of Berlin; 3rd, Dr. C. S. Smith of Elroy; 4th and 5th, Dr. G. A. Kletzsch of Milwaukee; 6th, Dr. Herman Reineking of Sheboygan; 7th, Dr. W. T. Sarles of Sparta; 8th, Dr. J. F. Pritchard of Manitowoc; 9th, Dr. T. J. Redelings of Marinette; 10th, Dr. J. M. Dodd of Ashland; 11th, Dr. E. L. Boothby of Hammond.

Dr. W. T. Sarles was elected chairman of the Council and Dr. J. M. Dodd, clerk. It was agreed as the sense of the meeting that each member of the Council shall feel at liberty to use his best judgment in the division of his district into Medical Societies—organizing in each county when practicable, but uniting two or more counties in one Society when deemed advisable.

On motion of Dr. Reineking the members of the Council were authorized to make application to the President and Secretary of the State Society for Charters for County Societies, when properly organized and accepted by the Council.

On motion of Dr. J. S. Walbridge, the Secretary of the State Society was authorized to procure the necessary blanks for proper organization of the County Societies from the office of the American Medical Association and charge the same to the proper authority.

On motion the Council agreed to pay the Wisconsin Medical Journal Co. one dollar per year for every member of the Society—in monthly installments, and that the Publication Committee consist of the First Vice-President, Dr. James Mills of Janesville, the Secretary and the Treasurer of the State Society who shall be authorized to make such payments.

MILWAUKEE MEDICAL SOCIETY.

Meeting of April 28, 1903.

The President, Dr. A. J. Burgess, in the chair.

Drs. A. W. Gray, W. H. Washburn and E. Copeland were appointed members of a committee of arrangements for a smoker to be given the State Medical Society of Wisconsin at the time of its annual meeting in June.

Dr. R. G. Sayle read a paper entitled, "Diagnosis and Prognosis of Malignant Disease and of Chronic Infectious Diseases of the Testicle."

He considered carcinoma, sarcoma, tuberculosis, syphilis and gonorrheal swellings of the testicle, bringing out the symptoms and differential diagnosis of each and stating the prognosis. He made a plea for the radical treatment of all of these forms, basing his arguments on the difficulty of a positive diagnosis and on the fact that the nature of the affection was important only in relation to prognosis, as to possibility of return of the disease after an operation; the organ being of no value to the patient in any of these diseases.

In the discussion of the paper Dr. J. M. Beffel cited instances of mistakes in diagnosis which he had observed in the course of pathological work, and remarked upon the probability of endothelioma being a more common form of tumor than has been thought.

Dr. Burgess warned against overlooking the testicle in cases of abdominal tumor in men, and instanced two cases of sarcoma of a retained testicle which he had seen; also a case of tumor, probably tubercular, of a retained testicle, in which the diagnosis of appendicitis had been made.

Dr. A. G. White reported a case of "Thrombosis of the Cerebral Arteries" occurring in a gilder. Dr. J. M. Beffel demonstrated the specimen. Drs. Sayle, Washburn, Myers, Burgess and Boorse participated in the discussion.

Meeting of May 12, 1903.

The President, Dr. A. J. Burgess, in the chair.

Dr. A. J. Puls demonstrated two specimens of intramural uterine fibromata. The detailed histories of these cases will appear among the Clinical Reports in a future issue of the JOURNAL. Drs. A. J. Patek, R. Elmergreen and O. Thienhaus took part in the discussion.

Dr. W. F. Becker presented a case of Brachial Monoplegia of Hysterical Origin in a young man who had been bitten in the hand

by a dog three months before. The case presented severe convulsions, paralysis of the right arm and anesthesias. The dog was not rabid, nor was there any sepsis, the wound healing quickly and leaving no scar. The marked degree of analgesia under control tests, the fact that the anesthesias were unknown to the patient until disclosed to him, and the mobile character of the anesthesia which was transferable to the healthy arm under metallotherapy, render malingering untenable. (A detailed report of the case will appear in a subsequent issue of the JOURNAL.)

Dr. W. A. Sickles showed photographs of a malignant ulcer of the face of an old man before and after treatment with the x-ray.

Dr. F. Shimonek spoke of a case of cancer of the breast in which the x-ray had been used for a recurring nodule after operation. The treatment was followed at first by an apparent disappearance of the nodule, but later by an increased growth of the tumor.

Dr. Shimonek also reported a case of vesico-uretero-pyelo-nephritis, which will appear in detail among the Clinical Reports in a subsequent issue of the JOURNAL.

Dr. I. D. Mishoff presented a specimen of a uterine growth which had been expelled after intra-uterine electrical treatment. No diagnosis of the nature of the growth had been made.

WAS IT SUICIDE OR MURDER?

Dr. J. M. Beffel reported the following interesting autopsy in which the question of murder or suicide might arise:

A man, 55 years of age, according to the statement of his wife, arose at 5 A. M. to go to the out-house. He was dressed in trousers and undershirt. Not returning shortly the wife went in search of him and found the body suspended from a rafter in a shed in the rear of the lot. Blood was flowing from a wound on the top of his head, over the right side of his face, soaking the collar and dripping over the front of the shirt. On the floor was a large hatchet with blood on the back and sprinkled over the blade. There was blood on the floor and on the seat of a small chair.

In examining the body we found an ecchymosed line corresponding to the position of the cord (a small clothes line) about the neck, extending from the top of the thyroid cartilage around to the base of the occiput. Saliva had drooled from the corners of his mouth over his beard. There was a little ecchymosis in the right temporal region. There was a cut one inch in length near the mid-line of the right parietal bone extending to the skull. On stripping the anterior flap of the scalp forward we found an ecchymosed area involving the whole depth of the scalp corresponding to the right temporal muscle. On cutting into the muscle it popped out like a testicle when cut. There was considerable hemorrhage into the muscle. Further examination

showed no fracture of the skull, no laceration of membranes of the brain, and no cerebral hemmorhage. The skin was stripped back from around the whole neck. There was not the slightest congestion of any of the muscles of the neck. There was some congestion of the epiglottis, but the larynx and trachea were not congested. The tongue was not bitten and was pressed to the right side. The left corner of the thyroid cartilage was broken one-half inch from the tip. The right lung showed some congestion, the blood was very dark—almost black—and flowed from the cut surface. The left lung was not badly congested; blood did not flow from its cut surface. The ventricles were empty, the left was contracted hard. There was no diseased condition of the heart or lungs. There was considerable congestion of all of the abdominal organs, and hemorrhage into the mucosa of the ileum involving an area about one foot in length and four feet from the ileo-cecal valve. The stomach was distended, and in attempting to remove it the whole cardiac end and fundus fell to pieces like so much stringy mucus: the mucosa was covered by a dark mucus. The pancreas was considerably congested; the tail was grayish white on section; the bladder contained six ounces of clear urine.

The conditions suggesting murder are: the two large scalp wounds, the absence of congestion under the line of the rope, a full bladder, and the hatchet spotted with blood. The conditions suggesting suicide by strangulation are: the saliva drooling from the mouth; the great congestion of all of the abdominal organs, and the man suspended by a rope around his neck.

The absence of blood from the muscles of the neck is due to the fact that the scalp bled very freely. Saliva would not flow from the mouth of a dead man when suspended. Therefore, it was our opinion that the man had attempted to kill himself with the hatchet, and failing in this, he took a clothes line and hanged himself.

MEDICAL SOCIETY OF MILWAUKEE COUNTY.

May 15th, 1903.

The regular monthly meeting was held in the Milwaukee Medical Society rooms, Goldsmith Building, May 15, 1903. Seventeen new members were elected, bringing the total membership of the society up to one hundred and sixty-two.

W. H. Washburn, H. M. Brown and T. H. Hay were elected delegates to the annual State Medical Society meeting.

Dr. A. J. Patek read a paper on "Pseudo-Pertussis Influenza."

He called attention to the meager references to this symptom in the literature of influenza, the only information obtainable coming from an article in the Archives of Pediatrics (June, 1900) by Forch-

heimer, of Cincinnati. Holt mentioned a cough simulating whooping cough at a meeting of the American Pediatric Association in 1895. Forchheimer noticed its occurrence in epidemics. Points in diagnosis are a sudden onset and presence of influenzal symptoms; early development of the whoop after the first catarrhal manifestations; persistent fever and marked asthenia; cessation of all catarrhal symptoms when the whoop occurred; and the existence of an epidemic. The symptom is also frequent in adult life. Patek reported two typical cases. Treatment consisted in the use of Heroin internally and mild alkaline antiseptic nasal douches.

The paper was discussed by Drs. R. G. Sayle and H. M. Brown, who both spoke of the frequent occurrence of such a paroxysmal cough this spring.

Dr. W. T. Nichols reported cases and presented specimens of submucous uterine fibroid, in which vaginal hysterectomy was done; tubal pregnancy; dermoid cyst; deciduoma maligna. Cases were discussed by Dr. Stoddard and by Dr. Puls, who advised coeliotomy to vaginal hysterectomy in the case of fibroid presented. Dr. Shimonek reported recurrence and increased rapidity of extension in two cases of carcinoma after x-ray treatment.

Dr. E. W. Kellogg reported a case of pendulous abdomen in a pregnant woman, the abdomen reaching almost to the knees. Delivery was affected in a few minutes, after the woman had been in ineffectual labor for hours, by tipping the uterus back into normal position. After recovery an elliptical piece extending through the entire thickness of the abdominal walls, was excised and the wound sutured, resulting in good recovery and correction of the pendulous condition.

A. W. GRAY, SECRETARY.

LA CROSSE COUNTY MEDICAL SOCIETY.

May 7th, 1903.

The regular monthly meeting of the La Crosse County Medical Society was held on Thursday evening, May 7th. The meeting was to have been a clinical one, yet no one had any cases to present. The change in the Constitution of the Society—as recommended for local societies by the Committee of the American Medical Association—was discussed but not adopted; its adoption was postponed for a future meeting. As delegates to the State Society Dr. E. Evans of this city was elected, with Dr. Charles H. Marquardt as alternate.

The Society then adjourned to meet again in September.

WOOD COUNTY MEDICAL SOCIETY.

The Wood County Medical Society was organized with twelve members on May 26, 1903.

The officers of the Society are: President, Dr. O. T. Hougen, of Grand Rapids; Vice-President, Dr. S. A. McGregor, of Nekoosa; Secretary and Treasurer, Dr. Frank Pomainville, of Grand Rapids.

The next meeting will be held June 16, 1903, when Dr. Rockwell, of Grand Rapids, will read a paper.

CURRENT LITERATURE.

MEDICINE.

W. H. Washburn, M.D., Jos. Kahn, M.D., L. F. Jermain, M.D., A. W. Myers, M.D.

On the Occurrence of Diastolic Murmurs without Lesions of the Aortic or Pulmonary Valves.—R. C. CABOT and E. A. LOCKE (*Johns Hopkins Hospital Bulletin*, May, 1903) report four cases with autopsies and review the literature of the subject.

Diastolic murmurs, aside from those due to injury or deformity of the aortic and pulmonary valves have been known to occur under each of the following conditions:—

1. In association with dilatation of the aorta.
2. In association with intense anemia.
3. In association with tuberculosis of the lungs and pleura, and in other conditions involving an abnormal suction or pulsation exerted by the heart upon neighboring portions of pulmonary tissue (cardio-respiratory murmurs.)
4. As an accentuation of a venous hum transmitted from the neck veins or produced in the vena cava superior.
5. In association with mitral disease and dilation of or hyper-pressure in the pulmonary artery.

The first of the reported cases was probably due to a genuine regurgitation at the aortic orifice resulting from dilatation of the ring into which the valves are inserted. The other three cases seem to be due to intense anemia. Two explanations of these murmurs seem most plausible; that of Sahli, that they result in some way from the extreme thinning of the blood, or that they are due to a temporary, elastic stretching of the aorta, relieved when the heart ceases to beat, and therefore not demonstrated post mortem. This presupposes a high blood pressure which is absent in many cases. In one of the cases, owing to a chronic glomerulo-nephritis the blood pressure was high and might have stretched the aortic ring, especially as the aorta was unusually

thin and elastic. The other two cases the authors attribute to the extreme thinning of the blood, although they do not consider this a satisfactory explanation. (J. K.)

The Resemblance of Malignant Endocarditis to Typhoid and Paratyphoid Infections.—HENRY L. ELSNER of Syracuse, N. Y., (*Medical News*, May 9, 1903) details the clinical histories of three cases that were diagnosticated as typhoid fever by one or more experienced clinicians. These cases presented all the clinical features of typhoid fever, but when the Widal test was applied in the second and third cases, after the lapse of a considerable time, there was no reaction. The fourth case recorded was one of malignant purpura hemorrhagica in a patient who had a non-malignant endocarditis, which had followed repeated attacks of rheumatism. The interesting features in this case were: Profuse and persistent epistaxis recurring for nearly two weeks and reducing the patient to an extremely anemic condition, early febrile movement, petechiæ, and the typhoid state. In this case the Widal test was negative and the blood cultures sterile.

The first three cases terminated in death. In the first case an autopsy was refused but the late history of the case made it sufficiently clear that it was one of malignant endocarditis. In the second and third cases the autopsies confirmed the diagnosis of malignant endocarditis which was made at a late period in the course of the disease. The fourth case recovered. The history of this latter case was introduced in order to illustrate the great difficulty in reaching a correct diagnosis excluding malignant endocarditis.

The sources of infection in some of these cases were so apparently insignificant that they would ordinarily be thought of no importance. The writer lays some stress upon this circumstance, and affirms that malignant endocarditis is a disease which may result from an infection however trivial and insignificant.

The course of all these cases was such as to indicate the great importance of blood examinations in all acute infections in which the clinical features are those of typhoid fever, the exclusion of this diagnosis being impossible without the aid afforded by these methods of investigation. Attention is called to the fact that the diagnosis of malignant endocarditis cannot be discarded merely because blood cultures remain sterile.

This interesting and valuable paper ends with a strong plea for the fullest and most painstaking study of infectious diseases by means of all the modern scientific methods, especially the study of the blood conditions.

(W. H. W.)

An Aid to the Diagnosis of Ulcer of the Stomach.—MENDEL. (*Münchener Med. Woch.*, March 31, 1903) points out the value of direct percussion of the epigastrium in the diagnosis of ulcers of the stomach and duodenum.

He percusses lightly over the epigastrium, using a percussion hammer, the abdomen being as completely relaxed as possible. If the stomach and the adjacent organs are sound no pain will be experienced, while if an ulcer is present a point will soon be found where the lightest stroke will be felt as an intense pain more or less persistent.

Percussing radially toward this spot and marking the points at which the pain is first felt will outline a circular area in most cases, within which the lightest percussion is painful, while outside this boundary more forcible blows cause no pain whatever.

This area does not necessarily correspond either in size or position with the ulcer, and yet as the process of healing takes place under appropriate treatment its boundaries will grow smaller and it will eventually disappear when the cure is complete.

By this method of direct percussion painful areas may be accurately mapped out when there appears to be no tenderness to pressure applied in the ordinary way.

In duodenal ulcer a sharply defined painful area will be found by this method close to the linea alba just below the middle point of a line connecting the umbilicus with the margin of the ribs.

It is obvious that in other painful affections involving structures in the epigastric regions, such as gastritis, perigastritis, carcinoma, cholelithiasis, disease of the colon, etc., there will be tenderness on percussion but in these conditions there will not be the sharp localization, while the other manifestations of the disease will clear up the differential diagnosis. (A. W. M.)

A Study of Weight in Pulmonary Tuberculosis.—L. BROWN (*American Medicine*, April 25, 1903) in an article based upon the study of twelve hundred patients at the Adirondack Cottage Sanitarium, reaches the following conclusions:

1. Toxin absorption in the tuberculous area causes reduced assimilation and fever. Loss of weight is in all probability due to this.

2. It is not the amount eaten but the amount assimilated that is of value to the consumptive.

3. Carefully regulated rest and exercise are of most importance as regards the body weight in pulmonary tuberculosis. Forced muscular activity is always injurious.

4. Assimilation is often markedly increased by change of residence or of climate.

5. Excessive gain in weight may be injurious.

6. The gain in weight is usually first evident on the chest, next upon the abdomen in men and on the hips in women.

7. A quick, constant and continuous loss of weight indicates as surely as any other phenomenon that a patient is rapidly losing ground.

8. A gain of a few pounds is of little value in prognosis, but on the whole patients who gain over 20 pounds do better than those who gain less.

10. Sunshine and dryness are not necessary factors of gain in weight. Cold weather stimulates assimilation and gain in weight more than warm.

(J. K.)

Moser's Streptococcus Serum in Scarlatina.—POSPISCHILL (*Wiener klin. Woch.*, April 9, 1903) states that the question of the etiology of scarlet fever will not be definitely settled even by the demonstration of the effectiveness of the

scarlatina-streptococcus serum for the severe symptoms which clear up after its use might be due to a secondary streptococcus infection.

He reports in detail 26 cases in which it was used and concludes that it has a distinct effect shown by the fall of temperature, improvement in pulse and respiration, relief of restlessness and delirium, quiet sleep, disappearance of cyanosis, and improvement in the taking of nourishment which seemed to result directly from its use.

(It would be unfair to draw statistical conclusions from this report because the serum seems to have been used only in very severe cases. The improvement following immediately after the injections leads one to wonder whether favorable results might not have been obtained in some of the fatal cases if the doses of the serum had been larger or had been repeated. In only one case was more than one injection given.) (A. W. M.)

Cardiac Hypertrophy in Diseases of the Kidney.— H. SENATOR (*Deutsche Medicinische Wochenshrift*, January 1, 1903), reviews the various theories by means of which this hypertrophy has been explained. Traube's mechanical theory and the theory of increased blood viscidity of Ewald are discussed. Based upon work done by Strauss in his clinic during the last few years, he concludes that in chronic parenchymatous and in acute nephritis the molecular concentration of the blood, the non-albuminous nitrogen and the toxicity of the urine remain normal, while in chronic interstitial nephritis they are increased. Albuminous nitrogen is decreased in the former, normal in the latter. The increase in the molecular elements of the blood leads to irritation of the heart and blood vessels. In parenchymatous nephritis, on account of the slighter degree of irritation, the permeability of the vessel wall is increased and edema results. The continued irritation leads in time to thickening and contraction of the lumen of the vessels with cardiac hypertrophy. The contraction and thickening of the vessel walls prevent further exudation. In the atrophic kidney—the abnormal elements being present in greater quantities—narrowing and thickening of the blood vessels occur earlier, and consequently hypertrophy is greater and occurs much earlier than in the parenchymatous form of the disease. (L. F. J.)

The Diagnostic Value of Quantitative Determination of Urinary Pigment.— PROF. G. KLEMPERER (*Berliner Klin. Wochenshrift*, April 6, 1903), describes a useful instrument for the quantitative determination of urinary pigment. He says that the functional ability of the kidney can be determined by the amount of urinary pigment in the urine, in as much as the pigment represents a part of the function of renal epithelium. The test is made by comparison with a standard color. When the urine is scanty, but dark, the color shows that the kidney still retains its functional activity. If, however, the color becomes lighter and the amount of urine does not at the same time increase, it is an indication of renal insufficiency. The lighter the urine, the more severely diseased the kidney. (L. F. J.)

SURGERY.

F. E. Walbridge, M.D., H. A. Sifton, M.D., F. Shimonek, M.D.

The Importance of Early Diagnosis of Cancer of the Stomach.—MAYO ROBSON (*British Medical Journal*, April 25, 1903) contributes an article on the above subject. Thirty years ago, carcinoma of the stomach was a hopeless disease, as there is no known medical treatment. In 1879, Pean made the first attempt to remove a malignant pylorus. From that time steady progress has been made in the methods of dealing with those desperate conditions of the stomach so that at the present time cases of carcinoma that are diagnosed reasonably early show satisfactory and encouraging results. Robson goes very thoroughly into the various methods of diagnosis, and advocates in all doubtful cases an exploratory incision. He reports five cases in which at the time of operation large masses involving the stomach having every appearance of malignancy were completely relieved by gastro-enterostomy. Those cases as judged by results were apparently not malignant but of an inflammatory nature. He also reports a number of cases in which a part of the stomach was removed for undoubted malignant growth. The cases reported are sufficient evidence to show that removal of even a considerable portion of the stomach may be something more than a palliative operation, and that it justifies him in saying that, although it is better to have cases of cancer diagnosed and operated upon early, yet we need not take the pessimistic view which has been given by some surgeons—that if a tumor be manifest it is too late to perform a radical operation. In conclusion, he makes the following statements: It is desirable to make the diagnosis of cancer of the stomach at the earliest possible moment; it may be needful to perform an exploratory operation in order to complete or confirm the diagnosis; that such an exploration may be done with little or no risk in the early stages of the disease; that when the disease is advanced and a tumor perceptible, an exploratory operation is as a rule still advisable in order to carry out radical or palliative treatment when possible; that when the disease is too extensive for any radical operation, the palliative operation of gastro-enterostomy, which can be done with very little risk, may considerably prolong life and make the remainder of it much more comfortable and happy; that some cases thought at the time of operation to be cancer, too extensive for removal, may after gastro-enterostomy clear up and completely recover; that in cases of disease of the cardiac end of the stomach, too extensive for removal, the operation of gastrostomy may considerably prolong life and prove a great comfort to the patient; that even where the disease is too extensive either for removal or for gastro-enterostomy being performed with a fair chance of success, the operation of jejunostomy may occasionally prove of service to the patient; that where a radical operation can be performed, the thorough removal of the disease may bring about as much relief to the patient as does the operation for removal of cancer of the breast, and in some cases a complete cure may follow. (H. A. S.)

Intestinal Injuries Following Abdominal Contusion.—ROBT. G. LE CONTE (*Annals of Surgery*, April, 1903) reports several cases of Abdominal Contusions, and gives his views as to symptoms and diagnosis. He quotes

statistics showing a mortality of from 93 to 98 per cent. in cases of rupture of the intestines not operated upon, and states that the mortality of operated cases is between 50 and 60 per cent.

He believes a diagnosis can be made in most cases and that operation should be done as early as possible. The opinion of writers who advise operation in all cases where local tenderness, rigidity and pain are the only symptoms he believes too radical. No one symptom is sufficient for diagnosis, the most reliable are increasing rigidity and facial expression. Deep abdominal pain, vomiting after recovery from shock and distention are all symptoms which will aid in diagnosis. A secondary fall of temperature below normal after reaction from shock with an increasing rapidity of pulse and respiration are symptoms indicative of most serious trouble. (F. E. W.)

Indications for Extirpation of the Gall Bladder.—M. H. RICHARDSON (*Medical News*, May 2, 1903) says the ideal operation upon the gall bladder by which the viscus is closed immediately after removal of gall stones has no place in the surgery of the gall bladder.

He thinks the removal of the gall bladder in every case is too radical. If the gall bladder is healthy it is not removed. He says, "I may, however, in time become convinced that in all cases of gall-stone disease the best treatment will be the removal of the gall bladder with the stones."

All gall bladders affected with new growths, gangrene, contracted and inflamed gall bladders, and those which cannot be drained, should be extirpated.

Drainage is preferable in the dilated and infected gall bladder provided the pathological changes have not progressed beyond recovery; in acute cholecystitis with severe constitutional symptoms when it is not contracted or gangrenous.

Extirpation is preferable when a stone is lodged in the cystic duct and cannot be forced into the gall bladder.

In simple gall stones drainage is indicated. (F. E. W.)

Surgical Treatment of Gastric Ulcer.—C. M. MOULLIN (*British Medical Journal*, April 25, 1903) contributes an article on this subject. He calls attention in very forcible language to the fact that a large number of cases of chronic ulcer of the stomach are treated for years without any improvement. He admits that the majority of cases of gastric ulcer do not belong to surgery but that there is a certain proportion of the cases which resist all known forms of medical treatment, and he believes that the time has now come when all cases of persistent pain and vomiting, or repeated hemorrhage should be submitted to surgical treatment. He is strongly in favor of dealing with the ulcer itself in cases where it is possible—either by excision or ligation. Gastro-enterostomy should be reserved for cases in which it is impossible to deal with the ulcer direct. He reports fifteen cases of operation with two deaths. The two cases which resulted in death were operated on in extremis caused by loss of blood. (H. A. S.)

ORTHOPEDICS.

Geo. P. Barth, M.D., H. E. Dearholt, M.D.

Symptomatology and Therapy of Spastic Wry-neck (Torticollis spastica).—K. HASEBROCK (*Münch. Med. Wochenschrift*, April 14, 1903) discusses this subject in an illustrated article. He states that the failure of radical surgical procedures upon the tissues is due to the fact that the condition is not one of irritation along one nerve tract but along several, which acting in unison produce a spasticity of the superficial and deep muscles of the neck. Irradiation also plays a distinct part.

As a therapeutic measure he recommends the elastic pull of rubber bands and claims surprisingly good results from this measure. The apparatus is made and applied as follows: A broad band of adhesive plaster to the lower end of which two rubber bands are fastened, passes over the head from side to side, the banded end of the plaster being at the tip of the mastoid process of the well side. One band is passed anteriorly, the other posteriorly, and both are inserted into buckles sewed either to a piece of plaster the width of two hands applied to the chest just below the axilla of the affected side in cases in which the splenius muscles are chiefly affected, or to a belt about the waist where the sterno-cleido-mastoid is the muscle chiefly involved. The action of the apparatus can be regulated by graduating the pull exerted by either band. H. claims that the action of the appliance is not merely mechanical, but that the band crossing the weaker (non-spastic) muscles acts as a constant stimulus causing them to contract, and by this contraction giving them the exercise needful for their development to the extent of overcoming the stronger action of the spastic muscles.

Several cases are cited in full. (G. P. B.)

Briefs on Physical Training.—G. FRANK LYDSTON (*American Medicine*, Feb. 21 to March 21, 1903, inclusive) makes a plea for the better understanding and general practice of physical training by the medical profession. The system of movements which he believes to be the nearest ideal are those in which flexors are moved against resistance of extensors and vice versa. Enough of his conclusions are given here to make a comparatively exhaustive abstract.

1. The end and aim of physical training should be to utilize the inherent physical capital of the individual and develop it to its normal physiologic standard. The individual equation is the keynote of physical training. One should strive to develop and make ready to his command such muscular fiber as normally belongs to the individual subject.

2. A general adoption of physiologic muscle building woud cause a marked improvement in the physical strength, endurance and beauty of the race. Model physiques are much rarer than they should be.

3. Physical and intellectual development should go hand in hand. Neither should be perfected at the expense of the other. The harmonious development of mind and muscle is the most important factor in human society.

4. A more thorough understanding and more general practice of physical training would tend to reduce pauperism and crime, and would materially decrease the expense of our ponderous legal machinery and penal system.

5. Estimating the developmental necessities and capacity of a given individual by comparative measurements is often fallacious. The idea that an individual of a given height and weight should present definite proportionate measurements of the various portions of the body is absurd.

6. The inherent capacity for muscular development possessed by certain individuals is extreme. The muscular development of a Sandow, under precisely similar conditions, is possible only to Sandow and exceptional individuals of his type.

7. Specialism in muscle building is justifiable only in so far as it tends to bring up any given portion of the body to the relative proportions normal to the particular individual, i. e., to the normal symmetry.

8. In beginning the training of adults the occupation should be considered. The muscles of the highly-trained athlete are out of place, useless, and perhaps injurious to the man whose occupation is sedentary. Unused muscular fiber and visceral capacity result in muscular and visceral degeneration.

9. Certain individuals tend to become muscle and joint bound under very moderate exercise, and great care should be taken in prescribing physical training for them.

10. The systematic practice of athletics, when carried to extremes, is likely to develop the athletic habit, i. e., a condition of the body in which cessation of training produces serious impairment of health. Under such circumstances the individual is a slave to training.

11. Athletic overstrain is frequent, and occurs in two forms—acute and chronic. Its evils are manifested, first, in individuals who are out of condition; second, in individuals, who, while in condition, undertake inordinate feats.

12. Serious disturbances of the heart, lungs, kidneys and liver may result from overstrain, the heart, especially, being often damaged. Even appendicitis may be produced by athletic overstrain. Competitive athletics, as the term is ordinarily used, are especially dangerous in their effects upon the viscera.

13. The average professional athlete at the age of 30 has exhausted his reserve fund of vitality, and should cease active training and athletic competition.

14. Symmetric muscle building should be a preparation for practical athletics of all kinds. This muscle building should involve increase of volitional muscular control and a development of the muscles up to the individual normal standard, no attempt being made to put large and bulky muscles upon individuals in whom such muscles are not normal. The first lesson the subject should learn is the necessity of putting his brain-cell in absolute command of his muscle fiber.

15. The ideal system of muscle building is that which involves the least expenditure of time, and the use of the least apparatus.

16. Abdominal muscle development is the keynote of success in physical training.

17. Of practical athletics the best forms are boxing, fencing, and handball. All forms of athletics are most beneficial if practised in the open air. Golf is admirable in this respect.

18. The element of play should enter largely into all forms of athletics, diversion of mind and cheerful companionship being a *sine qua non in* obtaining the best results. (H. E. D.)

A New Method of Correcting Flexion Deformity at the Knee Joint.—ROYAL WHITMAN (*American Journal of the Medical Sciences*, May, 1903) gives an illustrated description of his operative procedure. Flexion deformity is often complicated by backward displacement and outward rotation of the tibia. The muscular and fibrous contractures around the joint, in addition to the inter-articular changes, have made manual extension almost impossible, without increasing the displacement to a subluxation. Instead of making the thigh the fixed point with leverage upon the leg, as has been the usual procedure, Dr. Whitman fixes the leg and uses the thigh as the lever. After being anesthetized, the child is placed face down, with enough pillows under the trunk to allow the anterior surface of the tibia to lie flatly upon the table. By forcible massage of the muscles of the thigh, the resistance is gradually overcome and the angle of deformity lessened simultaneously. The contractured muscles are under the eye of the surgeon throughout the operation. The claim is made that there is less pain after this than in other methods. Manual force, he believes to be preferable to mechanical and more intelligently controlled. (H. E. D.)

Operative Treatment of Peroneal Paralysis.—CARL DEUTSCHLÄNDER (*Centralbl. f. Chir.*, April 18, 1903) offers the following operation in cases of paralysis of muscles supplied by the peroneus nerve where those on the posterior surface of the leg supplied by the tibial nerve are intact. Briefly stated the operation is performed as follows:

After the leg is rendered bloodless an incision is made in the lower posterior third of the leg on the inner surface of the tendo Achilles. This tendon is lengthened by the plastic method of Bayer till the foot can easily be brought in extreme dorsal flexion without great tension on the tendon. This wound is then temporarily tamponed. A longitudinal cut is now made in the anterior lower third of the leg to, but not into, the crucial ligament. The exposed tibialis anticus and extensor longus digitorum tendons are then pulled free from their sheaths, the foot being strongly flexed dorsally, till muscle fibres are reached and here both are divided, the muscles being held by retaining sutures. These tendons are then so crossed, the extensor tendon being anterior, that the extensor points to the inner and the tibial to the outer malleolus. An oblique canal is now bored around the outer malleolus hugging the bone and appearing at the upper end of the posterior cut beside the Achilles tendon. The tibialis anticus tendon is pulled through and fastened to the freshened Achilles. A similar canal is made around the inner malleolus and the extensor tendon pulled through and fastened to the tendon of the flexor digit. communis. The posterior wound is now closed. The muscle stumps of the tibialis anticus and extensor communis digitorum are pulled down and sewed to the point of crossing of the tendons. The anterior wound is then closed, the whole dressed aseptically and the foot held in strong dorsal flexion by means of a plaster of Paris bandage.

The author claims the following advantages:

1. That the tendons are transplanted to muscles whose innervation is derived from the intact N. tibialis.

2. The transplantation is done in a symmetrical manner on both sides of the axis of the ankle joint.

3. The tendons being crossed and then carried around the malleoli, they received a broad surface of support on the bone and are firmly held against it; further, the tibialis anticus tendon receives thereby a strong supinatory and the extensor communis digitorum a certain amount of pronating power.

4. The oblique direction of the fibres of the transplanted tendons lessens the danger of future stretching.

5. In sewing the muscle stumps of the tibialis anticus and the extensor communis digitorum with the crossing point of the tendons the position of dorsal flexion of the foot is strengthened.

It is also possible that the muscle stumps may attain a certain amount of dorsal flexion power since, as Lange has shown, even highly paretic muscles may regain a part of their function as soon as they are subjected to sufficient tension. (G. P. B.)

DERMATOLOGY.

Louis F. Frank, M.D., O. H. Foerster, M.D.

Multiple Spontaneous Keloids.—M. TSCHIENONE (*Dermatologische Zeitschrift*, April, 1903) dwells at length on the histology, etiology and treatment of keloids and with the report of two cases, comes to the following conclusions: The keloid belongs to a group of new formations partaking of the character of fibromata. The hypertrophic scar is to be distinctly separated and only the primary and secondary keloids are to be ranked as true keloids. The etiology is still considered as doubtful, the main factor for the development of keloids being special personal, family or race idiosyncrasy, reacting with the formation of keloids on the slightest inciting causes. The prognosis and treatment as a rule is most unsatisfactory. (L. F.)

Some Therapeutic Properties of Bone Marrow.—CHALMERS WATSON (*Jour. of Cutaneous Diseases*, May, 1903). The preparation employed is an ethereal extract termed "Myelocene" prepared from the general marrow from the shaft of the long bones and is said to have distinct therapeutic value in the treatment of some skin affections. There was treated with it a case of lupus of the cheek, four inches in circumference with a marginal zone of active hyperemia. The parts were first bathed in hot water and the crusts removed; thereupon myelocene, previously liquefied, was applied with a pipette and the oil thoroughly rubbed into the parts affected. After thirty-seven days of daily treatment the improvement was very pronounced. After another month's treatment a general congestion was still noticeable which gradually disappeared without further treatment. With the exception of three or four points of suspicion the result is highly satisfactory and compares well with the methods of treatment by photo-therapy. (L. F.)

The Treatment of Ring-worm.—GEO. T. JACKSON (*Medical Record*, April 11, 1903) advises the use of a drachm or more of the crystals of iodine added to the ounce of goose-grease as a most effective remedy for ring-worm of the scalp and beard. This treatment has been in use at the Vanderbilt

Clinic, New York City, for several years, and has supplanted other forms of treatment.

Applications are made twice daily until slight swelling of the patch is produced, then once daily. In two or three weeks the hair falls out of the patch. If much reaction with swelling is caused, the treatment is to be suspended for a few days and a salicylated oil of 3 per cent. strength can be used. Barber's itch yields in three weeks. (O. H. F.)

Pemphigus Vegetans.—HAMBURGER AND RUBEL (*Johns Hopkins Hospital Bulletin*, March-April, 1903) discuss briefly the varieties of pemphigus, among which they class Duhring's dermatitis herpetiformis. The literature concerning pemphigus vegetans is reviewed and a detailed report of their case follows.

The patient was a farmer, age fifty-two years; the first lesions to appear were tiny vesicles on the lips, tongue, and inner surface of the cheeks, which broke down and left eroded areas. Hoarseness, pointing to an involvement of the laryngeal mucosa, was the earliest symptom. Within a month eruptions erroneously diagnosed as eczema appeared in both groins while the mouth condition continued; the patient was later treated for syphilis. One year after the onset of the disease H. and R. saw the case for the first time. The oral mucous membrane was then excoriated and irregularly covered by a whitish pellicle of macerated epithelium, while on the tongue pin-head sized vesicles were discovered. With the exception of the palms, soles and scalp no part of the body surface was entirely free from lesions, which consisted of several lentil to thumb-nail sized flaccid, discrete vesicles or bullae, and a great number of excoriations, one-half to eight ccm. in diameter, both discrete and confluent, with either a red weeping base and a border formed by a ledge of epidermis (suggesting the remains of a bulla), or covered with impetigo-like crusts and surrounded by a red halo. In the groins and perigenital regions were elevated greenish-brown, foul smelling excrescences about 10 to 20 cm. in diameter, of a papillary character, with the surface crusted and cracked. The patient did not react to treatment (continuous full bath) to any marked extent. From practically all the excoriations pigmented papillary excrescences developed as healing occurred, but the excoriations on the parts not covered by water failed to heal. The mouth and throat condition grew worse steadily, the patient became very much emaciated and fourteen months after the beginning of the disease died of broncho-pneumonia.

At the autopsy a large lympho-sarcomatous tumor was found in the anterior mediastinum, presumably originating from the thymus; this is of especial interest because a similar tumor imbedding the pancreas was found in one other case reported. The ganglion cells of the upper three dorsal spinal ganglia showed hyper-pigmentation or signs of degeneration, alterations doubtless without etiological significance. The brain and cord could not be examined.

Cultures from the bullae showed only the staphylococcus pyogenes aureus, but from the mouth, and from the blood after death, a pseudo-diphtheria bacillus was grown in pure culture, and was rediscovered in the heart's blood of an inoculated guinea-pig and rabbit, both of which died without exhibiting changes resembling those of pemphigus vegetans. (O. H. F.)

VITAL STATISTICS.

SUMMARY OF STATISTICS OF DEATHS, BIRTHS, CONTAGIOUS DISEASES, ETC., FOR APRIL, 1903.

(From the Monthly Report of the Health Department of the City of Milwaukee.)

Number of Deaths	350
Number of Births reported	495
Number of Marriages reported	125
Number of Still Births	30
Number bodies brought to city for burial	25
Total number burial permits issued	405
Number of deaths investigated by department	21
Number of deaths reported by Coroner	23
Cases of small pox reported	6
Cases of tuberculosis reported	1
Cases of diphtheria reported	29
Cases of scarlet fever reported	24
Cases of typhoid fever reported	19
Cases of measles reported	5
Cases admitted to City Isolation Hospitals	15
Permits for cremation	1

COMPARATIVE MORTALITY

For month of April, 1903, and Deaths from 7 Principal Zymotic Diseases, as taken from Official Reports.

City.	Population.	Deaths.	Annual Death Rate.	Small Pox.	Diphtheria.	Scarlet Fever.	Measles.	Typhoid Fever.	Diarrhoeal Diseases.	Tubercular Diseases.
*New York	3,732,903	6,682	18.62	1	240	124	51	45	191	803
Chicago	1,885,000	2,628	16.96	9	47	32	70	33	99	283
*Philadelphia	1,349,712	2,596	20.00	13	63	26	12	107	100	345
Cleveland	420,000	668	19.17	1	2	—	1	66	23	71
Buffalo	380,000	498	15.98	3	8	[illegible]	1	13	17	51
Milwaukee	315,000	350	13.55	—	6	[illegible]	2	7	19	39
New Orleans	310,000	506	19.91	2	—	—	—	6	28	102
*Washington	300,000	528	18.30	—	1	—	2	6	not giv'n	77

W. C. BENNETT, M. D.,
Registrar of Vital Statistics.

* For five weeks, ending April 4th to May 2nd, inclusive.

THE WISCONSIN
MEDICAL JOURNAL
JULY, 1903

THE PRESENT STATUS OF SURGERY OF THE STOMACH.*

BY WILLIAM J. MAYO, A.M., M.D.,
Surgeon to St. Mary's Hospital,
ROCHESETER, MINNESOTA.

We have within a short time gone over the records of somewhat over 900 operations upon the organs contained within the upper abdominal zone. A number of points of interest were developed. One of the most notable features was the exceedingly close relationship which existed between the gall bladder and bile passages, the stomach and duodenum, and the pancreas. The association of function and the continuity of mucous surface makes the disease of any one organ a menace to the integrity of the others. The gallbladder and stomach were the organs primarily affected in the large majority of cases. The duodenum, from its peculiar situation, seemed to act as a buffer and was secondarily involved in about an equal proportion of cases, from gallstone disease, and gastric ulcer. In the latter instance the ulcer was in the first portion of the duodenum, seemingly due to the acid gastric secretions eroding the mucous membrane at a point above the opening of the common duct, with its alkaline fluids. The pancreas was also usually affected secondary to gallstone disease or a duodenitis.

It is not to be wondered at that the exact pathological diagnosis has been difficult to arrive at in many of these cases, particularly as this field of work is comparatively new. Abdominal surgery owes much to pelvic surgery, which was first in the field; the ease of diagnosis and the remarkable results of operative procedures in the pelvis as contrasted with the fatality of the surgery of the abdomen in previous times, gave an impetus to abdominal work which at once placed it to the front and rendered it the pride of professional achievement. Exper-

*The Annual Address in Surgery. Read at the Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 4, 1903.

ience gained ofttimes as the result of mistaken zeal in the performance of unnecessary and mutilating operations upon the ovaries and tubes, and later the uterus, has since been turned to good account in the territory of gastro-intestinal disease. Pelvic surgery has reached its place—much more conservative and less often resorted to than five to ten years ago. Its relative importance in the field it introduced so brilliantly is probably now not better than third place. The appendix, after much discussion, has also reached its proper position in surgery, and as much can be said of gallstone disease, the extent and importance of which is but of late appreciated.

Let me call your attention to the fact that the stomach is destined to play a great part in the surgery of the future. Just as the appendix followed pelvic surgery—to be accepted and in turn replaced by the diseases of the gallbladder, so now the stomach and with it the correlated duodenum and pancreas, is to be the center of surgical observation. It is one of the curious phases of modern medicine that surgery leads the way. With the accumulated experience of thousands of post-mortem revelations, how little did we know about the diseases of the ovaries and tubes, extrauterine pregnancy and appendicitis. Gallstones were looked upon as innocent autopsy "findings," and to-day the correct interpretation of gastric phenomena is in an equally unsatisfactory condition.

Surgery of the stomach has been slow to advance—it had to live down a bad name. The early operations of the Billroth school for cancer, before modern abdominal surgery was properly understood, gave a discouraging mortality, the statistics of which still hamper and embarrass our work. Billroth, with the courage of conviction, attacked malignant disease of the gastric cavity, because then, as now, it was the victim's only chance, and speaking of his results, he sorrowfully remarked: "The patients left the operating room in profound shock, from which some of them recovered." Nor was the condition of benign disease much better. Operations for the deadly complications of ulcer, such as perforation and hemorrhage, gave a frightful mortality; no wonder that this work has been looked upon with dread by the physician and that he has continued "the sins of medical omission," having the results of "surgical commission" before his eyes.

Gastric surgery has been judged by its results in late operations for cancer and fatal complications occurring in the course of benign disease. We might as well condemn operations for appendicitis by the results of surgical operation for the general suppurative peritonitis which it sometimes caused. As a matter of fact, the stomach is one

of the most favorable organs for operative attack. Easily accessible to a large extent of its surface, with a splendid blood supply from four sources, it permits of a freedom of work and a certainty of healing not exceeded by any organ in the abdomen, and by no means least is the fact that its cavity can be rendered reasonably sterile before operation. The great difficulty to be surmounted is in obtaining a correct diagnosis. We have seen "gastralgia" disappear after the removal of gallstones, and dyspepsia relieved by the excision of the chronically inflamed appendix. The field of stomach surgery is being gradually relieved of a number of these parasites of diagnostic obscurity. It will no longer do to give a blanket diagnosis of "stomach trouble," and the symptoms of the patient, instead of being considered the disease, must be referred to their proper pathological source.

Compare the present knowledge of appendicitis with the complex symptomatic diagnosis of former days—obstruction of the bowels, inflammation of the bowels, peritonitis and so forth; it would be tedious to merely name them. They have gone the way of "pelvic cellulitis." It can be laid down as an axiom that ignorance breeds complexity and one need not be a prophet to foretell the disappearance of more than half of the so-called "diseases of the stomach" of our medical text books.

From a surgical standpoint, the stomach is comparable to the magazine of a coal stove, a self-feeder, so to speak, into the small intestine, where the real digestion and absorption take place. It has a few important duties to perform: with a weak solution of hydrochloric acid and pepsin the food masses are softened and macerated and the temperature of the material is equalized, and with the powerful musculature of the pyloric end, the whole is pulverized and slowly fed into the duodenum.

Upon what shall we base a diagnosis of a surgical lesion of the stomach? Our diagnostic means can be classified into three groups: first, the history of the patient; second, the physical outlines of the stomach, including the use of the stomach tube to develop stagnation or retention of food; and third, laboratory methods, including test meals, chemistry and bacteriology, and microscopy. My colleagues, Drs. Graham and Millet, have the records of nearly 1,100 examinations of the gastric contents in conjunction with the history and the size and position of the stomach and pylorus. Of these cases, over 300 came to operation. The diagnosis based on the history and physical outlines of the stomach and the rational signs and symptoms, gave a correct diagnosis in over 80 per cent. of the cases. The laboratory examina-

tions, including test meals and so forth, were of value in only a small percentage of cases, and then only as corroboratory evidence. Alone they were next to worthless. I do not mean to discourage such tests, but I must protest against the time spent in waiting until certain chemical phenomena appear before recommending operation. This is especially true as to the early diagnosis of cancer. Time and again have we had patients held for weeks, waiting for these supposedly valuable diagnostic appearances, until the developing tumor and cachexia discouraged the enthusiastic diagnostician and sent a hopeless patient to the surgeon.

Exploratory incision is the only hope for the patient with cancer of the stomach, and a suspicion of this disease should compel the physician to explain and let the victim and his friends choose between exploration and procrastination. In developing the outlines of the stomach, an ordinary Davidson syringe and a stomach tube are sufficient. In this way air can be pumped into the stomach and allowed to escape again and again, until a careful mapping out is accomplished. The carbonic acid gas test is often painful, and does not give time enough for thorough work; there are also a number of deaths recorded from the sudden distention rupturing a diseased gastric wall. The use of the stomach tube is also very valuable in showing the actual results of gastric function; not on test meals necessarily, but as to whether the ordinary meal is too long retained in the stomach. For instance, remnants of the evening meal found in the stomach in the morning on several occasions, shows mechanical obstruction at the pylorus. Inspection for gastric waves so commonly seen in obstruction at the pylorus, splashing sounds and so forth, are also of value.

I have no desire to go into the question of differential diagnosis, but I do wish to call the attention of the general practitioner to the fact that the refinements of technical diagnosis are often useless and occasionally harmful in causing delay, and that the sensible practitioner with the few simple means at his command, is perfectly capable of arriving at a reasonable diagnosis, and will at least be able to direct the majority of his patients needing surgical treatment, to the surgeon in time to be of benefit.

There are two great groups of surgical lesions of the stomach. 1st. Those of benign origin and usually inflammatory in character, with ulcer as the type. 2nd. Cancer of the stomach.

Ulcer of the stomach has been heretofore studied from its complications such as perforation and hemorrhage, and from autopsy findings. This has been unfortunate, as it has exaggerated fatal sec-

ondary phenomena and has thrown but little light upon the condition during the period of chronic disability, in which surgery would be a well-planned attempt to cure rather than a last resort. Acute ulcer is usually diagnosticated. The frequency of sudden perforation and hemorrhage in this variety of lesions has enabled more accurate understanding of the subject; but we must not take these symptoms to be the standard for chronic gastric ulcer. In this lies the frequent failure to recognize chronic ulceration. Time will not permit a general discussion of the diagnosis of chronic gastric ulcer; but I will briefly analyze the question of pain.

Pain is the most characteristic symptom of the old ulcer, and the nearer the lesion to the pylorus the more cramplike the pain, while in the duodenum it may almost exactly simulate gallstone colic. Chronic ulcer causes slow and painful digestion; the patient is careful of his diet and has usually one of his own, the value of which experience has taught him. The symptoms are not steady, and days or weeks of distress are followed by intervals more or less prolonged of comparative comfort. The pain symptom is often variable even during the period of one day, one or more meals giving no trouble and the next one, perhaps, causing much suffering. Unlike acute ulcer, hemorrhage and vomiting are not common symptoms, the latter, a late phenomenon, usually due to secondary contraction and obstruction at the pylorus. Acute ulcer is usually cured by rest, so also occasionally the chronic ulcer; but the latter gets its name because it has not been cured, and like chronic appendicitis and gallstones, the same case may be medically cured a score or more of times. Leube puts the death rate of ulcer at 25%, and says that if curable, four or five weeks should be the limit of required time. A very recent study of 500 cases treated at the London hospital between 1897 and 1902 is most interesting: 211 had had previous similar attacks, in other words, were known to have had ulcer with intervals of apparent cure. In the remainder the symptoms had been more or less continuous, 18% died and 42% were not cured at the time of discharge. A total of 60% died or not cured, and of the 40% of patients supposed to be cured, who can tell their future course? The large majority of cases of chronic ulcer of the stomach are surgical patients, and after a reasonable trial of medical treatment should be so considered.

The function of the stomach is interfered with mechanically, first, by obstruction at the outlet, which prevents proper egress of the food; second, by disease of the pyloric portion, which interferes with its muscular action; and third, disease of the fundus of the stomach, which

prevents proper reservoir function. Pyloric obstruction gives unmistakable evidence of its presence, by gastric dilatation, stagnation and retention of food causing fermentation, late vomiting, and emaciation. These cases are seen in all stages, from the slight temporary interference with digestion to the most marked degree of disability. The condition can be aptly compared to a valvular heart lesion; spells of dilatation alternating with compensation through hypertrophy give periods of comparative health after a more or less prolonged train of gastric insufficiency.

Benign obstructions are usually the late results of the healing of a gastric ulcer, and many times the symptoms are such as to lead to the diagnosis of cancer, and I have no doubt many victims are allowed to die under the impression of a necessarily fatal ending.

It must not be forgotten that like cancer, chronic ulcer is a disease of adult life, in this respect differing from the acute form, which is most common in adolescent females. Drainage operations give marvelous relief in benign obstructions at the pylorus; a patient at the verge of starvation in a few weeks becomes a picture of health. Gastroenterostomy has been the operation of choice; but in certain cases the newer pyloroplastic method of Mikulicz or the gastro-duodenostomy of Finney is also indicated, and gives in some respects even more desirable results.

The second group of cases is that in which ulcer exists in the muscular pyloric region, preventing the proper mixing of the food material. In over 200 operations for benign disease of the stomach, we have found ulcers capable of giving symptoms requiring operation, nearly always in that segment of the stomach lying to the right of the cardiac orifice and having the lesser curvature as its superior border. Its inferior border on the greater curvature does not extend so great a distance to the left of the pylorus. The fundus of the stomach has but feeble muscular action, it slowly compresses the food into the pyloric antrum and the latter by a piston-like action, strongly forces the food backward into the fundus as well as forward into the duodenum. Ulcer in the pyloric region gives rise to great pain and distress from the so-called "pyloric spasm." The latter is not confined to the pyloric sphincter, but to all or any part of this muscular region. The symptoms are pain and indigestion, gas, hypersecretion and so forth, the "pyloric syndrome" of Hartmann. Many of these cases in time heal, and the resulting cicatrix produces the obstructions which were discussed in group one. The proper surgical treatment of such cases is not settled and no one method will apply to all cases. The dilatation

is not extreme, as the obstruction is due to spasm and is essentially temporary in character. Gastroenterostomy on the cardiac side and usually at a point directly opposite the esophageal opening, gives splendid temporary results; but with the healing of the ulcer which quickly takes place as soon as the food is prevented from passing through the ulcerated area, the spasm relaxes and the pyloric region begins to functionate normally. The gastro-intestinal fistula often contracts, or the double stomach drainage of itself gives future trouble. The plastic operations about the pylorus, so useful in benign strictures, are probably not efficient, as, no matter how large the outlet, the food must still pass through the ulcerated area before reaching the pylorus, and that obstruction has no hand in the production of ulcer is shown by the typical examples in the duodenum.

Excision of the ulcer itself is sometimes feasible, but unfortunately the lesion is often multiple and may be hard to detect. Rodman suggests that in certain cases excision of the pyloric end of the stomach would be the operation of choice, as it would not only permanently cure the condition, but also prevent the possibility of secondary malignant degeneration, which has been a not infrequent occurrence. I believe that this is right.

The third group, in which the reservoir function of the stomach is interfered with is usually the result of extensive ulceration and cicatricial stenosis in the body of the stomach, causing hour glass contraction, the differential diagnosis of which time will not permit me to go into. It is interesting to note that hour glass stenosis may be multiple, and that a contraction at the pylorus also very commonly exists, so that a combination of gastro-gastrostomy and gastroenterostomy is usually indicated.

A few words in regard to some dilatations of the stomach not of organic origin, such as the so-called atonic dilatations often found in neurasthenic individuals and without the pyloric syndrome of Hartmann. In these cases, there is no retention and little stagnation of food. As a rule, these patients are not benefited by operation. This is also true of gastroptosis, which we have found to be present in over half the cases of movable kidney. Relaxed conditions in the neurasthenic state are not often permanently benefited by surgical operation. It is one of the misfortunes of surgical progress that neurasthenic symptoms are too often taken for organic disease. We have but to look back on the discredit thrown upon surgery by the mutilating operations upon the pelvic organs of women, to impell us to go slowly in that numerous class of neurasthenic stomachs, and before we operate for ulcer

let us be sure the lesion exists elsewhere than in the mind of the patient.

In conclusion I wish to speak briefly in regard to cancer of the stomach. Early operation is a pre-requisite, and diagnostic exploratory incision is necessary. We have operated upon 115 cancers of the stomach, of which 27 were radical extirpations; 5 died within a month, and one later from another cause, too early to know the ultimate result. Of the 21 who recovered, the average length of life was over a year. It is surprising how few failed to live 12 months or more. One lived 3 years and 7 months, several are alive now, after more than two years. I am convinced that cancer of the stomach will in five years give as good ultimate results after excision as breast operations. Sixty per cent. of cancers are located in the pyloric portion, that is, in the movable part of the stomach. The lymphatic arrangements are the same as the vascular, and the dome of the stomach is isolated from this portion, having a different vascular and lymphatic connection. If all of the lesser curvature be removed with the corresponding lesser omentum and all of the body and greater curvature to the left gastro-epiploic artery, the results in cancer of the pylorus should nearly equal what might be expected after complete gastrectomy. The remaining portion of the stomach enables intestinal anastomosis to be made with considerable ease and the gastric pouch rapidly enlarges to assume the function of the stomach.

DIGESTION IN INFANCY.*

BY ALBERT W. MYERS, M. D.,

MILWAUKEE.

The distinctive characteristics of the gross anatomy of the gastro-intestinal tract at birth require only a brief reference to embryonal structures for their explanation. As early as the fourth week of intra-uterine life the primitive straight alimentary tube shows a bulging toward the dorsal wall near the head end of the embryo which forms a spindle-shaped or somewhat oval enlargement, the beginning of the future stomach. The original position of this dilatation with its long axis parallel with that of the body is soon disturbed by the dispropor-

*Read before the Milwaukee Medical Society, April 14, 1903.

tionate growth in length of the intestinal canal as compared with that of the body, and by rotation first on its longitudinal and then on its anteroposterior axis it assumes the position which it occupies at birth. Owing to the absence of the pouch-like fundus, the stomach of the new born child still suggests its original spindle-shaped condition, and its oblique position with its long axis passing downwards and to the right across the median line, points back to its primitive longitudinal situation.

The relatively small size of the stomach at birth requires special notice; while in the adult the relation of c.c. capacity of the stomach to grm. of body weight is 1:23, in the newly born it is only 1:60. The growth of the stomach, much more rapid than that of the body as a whole, soon changes this materially and by the end of the first month the ratio has been reduced to 1:40.

The high position of the cecum in early life and the great relative length of the sigmoid flexure have no particular bearing on the digestive processes.

The functional activity of the salivary glands at birth is very slight. The amount of saliva secreted is small and the starch-splitting ferment, ptyalin, is found only in that derived from the parotid, and there in very small quantities. The presence of this diastatic ferment at birth has been denied, as some observers have failed to find it; this appears to be due to the fact that the activity of the alkaline saliva is inhibited by the formation of acids from the decomposition of particles of milk in the mouth. It is only after the most scrupulous care that the fluids of a child's mouth lose this acid reaction, but when this care is taken a feeble diastatic action may be observed. By the end of the first month ptyalin may be found in the secretion of the submaxillary gland, but it is not until the latter part of the first year that it is present in the saliva in sufficient quantity to act effectively upon starchy substances, a point to be constantly remembered in feeding young infants.

Histological study of the stomach at birth shows a poorly developed musculature; both the circular and the longitudinal layers are remarkably thin and the oblique layer is often entirely absent. It is not until the tenth month of extra-uterine life that the muscular coat attains the adult type. The mucous membrane presents some important differences; the lymphoid elements are more distinct than in adult life, the mucous glands are more numerous, while the gastric glands are fewer in number, shorter, and have wider orifices. Their cells are not fully developed although the differentiation of the chief cells from the acid or parietal cells may be made out in some cases. The gastric

juice secreted contains pepsin, hydrochloric acid, and the lab-ferment, but its activity is only about two-thirds that of the adult.

In the intestines a similar condition obtains; the musculature is poorly developed, the mucous membrane is very vascular and is rich in lymphoid elements, while the glands of Lieberkuehn and Brunner are not fully developed. The papillae are more numerous and the intestine is proportionately $\frac{1}{5}$ to $\frac{1}{4}$ larger than in adult life. The nerve supply is very rich but the fibres have not yet obtained their myelin sheaths. The secretion of the intestinal glands is strongly alkaline but probably has no digestive action.

The pancreatic juice at birth contains an active proteolytic ferment, but the fat-splitting and starch-splitting ferments are of later development, the last named, like that derived from the salivary glands, becomes effective only towards the end of the first year.

As might be expected from the large size of the liver at birth the amount of bile secreted is proportionately large, but the percentage of fat, salts, cholesterin, and biliary acids is low.

In considering the effect of these peculiarities of the gastro-intestinal tract at birth, it will be seen that the oblique position of the stomach favors the speedy passage of the liquid food into the duodenum. This position, together with the relatively large size of the cardiac orifice which is due to the poor development of the muscular coat, accounts for the great ease with which regurgitation of food takes place. The feebleness of the musculature of both the stomach and intestinal walls explains the weakness of peristalsis and also the tendency to dilatation, which occurs with considerable readiness.

In contrast to the condition of the muscular layer is the relatively advanced state of development of the mucous membrane, especially of the lymphoid apparatus, and the great vascularity of the entire tract, particularly of the villi. The nerve supply at birth is very rich, as has been seen, but the fibres have not yet acquired their myelin sheaths. Thus there are present the conditions most favorable for absorption,—well developed, highly vascular villi and complete lymphoid apparatus; while the secreting structures, the salivary and gastric glands, the pancreas, the glands of Brunner and Lieberkuehn are not so advanced in development and an easily digested food is an absolute necessity. The readiness with which absorption takes place and the peculiar character of the nerve fibres explain the irritability of the intestinal tract to mechanical or chemical insults.

At birth the gastro-intestinal tract is free from micro-organisms, but before the end of twenty-four hours they are present in considerable numbers, representing many varieties. Soon, however, two defi-

nite varieties become dominant and any consideration of the others may be omitted. In the upper portion of the tract the *bacterium lactis aerogenes* is the prevailing organism. This acts upon the milk sugar, splitting it into lactic acid, carbon dioxide and oxygen, thus helping to maintain the acid reaction of the chyme. In the lower portions of the intestinal tract, its nutrient medium, sugar, having entirely disappeared, this organism is superseded by the *bacillus coli communis*. The colon bacillus tolerates all reactions, even the alkalinity of decomposition, and all substances, and while it is able to form some acid out of milk sugar, it is better able to split neutral fats with the formation of fatty acids. In the feces the colon bacillus is the predominant organism, although the lactic acid bacillus and several others are present also.

In healthy bottle-fed children Langermann found from 3700—240,000 bacteria per c.c. of gastric contents, while in breast-fed children in health the number did not rise above 20,000. In digestive disturbances, however, these numbers were greatly increased. In the cases in which free hydrochloric acid was present the number ranged from 3200 to 6400. This occurs so seldom and for so short a time that it merely limits the growth, but does not entirely prevent it. The other agencies limiting the growth are: the lactic acid formed from the sugar of milk, the fats and fatty acids in the colon, and the normal absorption of the nutrient substances, especially albumin, and of moisture. The success with which the micro-organisms carry on their struggle against these opposing forces is demonstrated by the fact that Eberle found 33,000,000 bacteria per cu. mg. of fresh fecal matter in spite of sterile nourishment.

The rôle of bacteria in the processes of digestion is still in dispute as the experimental evidence is contradictory; thus, guinea-pigs removed by Caesarian section and maintained in a sterile atmosphere on sterile nourishment, gained in a normal manner, while chicks kept from infection showed a small gain in weight up to the twelfth day and then a loss, while those kept in freedom showed a gain of 250 per cent. in seventeen days. It seems probable, as will be seen later, that bacteria do aid to a certain extent in adapting the nourishment to the requirements of the individual.

As the food of the new-born child is entirely fluid it demands only a free passage through the mouth, for as yet the saliva plays no part in the process of digestion. Its first stopping place then will be the stomach, where it is held by the closure of the pylorus by muscular contraction. The entrance of food into the stomach excites the secretion of the gastric juice which immediately begins its work. The

character of the juice secreted and its action depend somewhat upon the nature of the food taken; if, as in most cases, it is the mother's milk, the first process will be the quick precipitation of the casein by the lab-ferment or parachymosin. This usually takes place within ten or fifteen minutes and the resulting coagula are fine light flakes, made even more permeable by the interposition of fat droplets, thus easily acted upon by the pepsin and by hydrochloric acid. While free hydrochloric acid is rarely demonstrable in the gastric contents until nearly the end of the process of digestion, it is continuously secreted in all cases, but immediately enters into combination with the salts and with the albuminates to form acid-albumins, so that it cannot be detected until the demands of the nitrogenous bodies and also of the salts have been satisfied. Under the influence of the hydrochloric acid and pepsin the acid-albumin or syntonin becomes first propeptone and then finally reaches the stage of peptone which appears from half an hour to an hour after the ingestion of the food.

The total acidity of the gastric contents gradually increases during the process of digestion, reaching its maximum one and a half or two hours after feeding; at this time free hydrochloric acid can always be found in healthy breast-fed children. In part and less effectively hydrochloric acid may be replaced by other acids, particularly by lactic acid. Thus the milk which carries away so much of the hydrochloric acid in combination with its salts and casein, brings in its milk sugar, which is readily decomposable into lactic acid, a substitute which may help to carry on the digestive processes when the supply of hydrochloric acid is insufficient.

In breast-fed children it is probable that the digestion of albumin is completed in the acid medium of the stomach and that none passes through the pylorus before undergoing solution. If cow's milk is given instead of human milk, the process is similar, but the coagula formed by the action of the lab-ferment are larger and tougher, less easily acted upon by the gastric juice, and while a part of the casein is carried through to the stage of peptone in the stomach a considerable proportion of it passes on into the small intestine unchanged. As a larger quantity of hydrochloric acid is required to saturate the albuminates and salts of cow's milk it follows naturally that there is less apt to be any excess of free acid in the gastric contents when the child is artificially fed, and as the bactericidal action of the gastric juice is dependent upon the amount of free hydrochloric acid contained in it, it will be seen that the bottle-fed child is in greater danger of gastric fermentation than is the nursling.

Gastric digestion concerns itself almost entirely with the proteids;

the carbohydrates may undergo some change under the influence of the HCl or, perhaps, of a special ferment, lactase, but the change into lactic acid which is the principal one is due to bacterial action and can hardly be considered a part of the process of digestion. The fats pass through the stomach unaltered.

The length of time required for these processes varies with the food; in breast-fed children it is probable that the passage of food from the stomach into the small intestine begins before the child has finished nursing and, on the average, the stomach will be found to be empty in an hour and a half. In those fed on cow's milk the time required is three-quarters of an hour to an hour longer,—the less the dilution of the milk the longer will be the time required for its handling. The larger portion of the food ingested is disposed of in the first hour but the remainder is acted upon more slowly.

On entering the small intestine the partially digested food encounters the pancreatic juice, the bile and the succus entericus, the secretion of the intestinal glands. As has already been seen, the pancreatic juice at birth contains an active proteolytic ferment, trypsin, acting in an alkaline medium, which serves as a safeguard to complete the changes in any portion of albumin which may escape from the stomach unaltered. In breast-fed children this is comparatively unimportant, for in them albumin digestion is completed in the acid medium of the stomach, but in babies fed on cow's milk much of the casein passes the pylorus in the intermediate stages or unchanged. The acid reaction of the chyme impairs greatly the activity of the trypsin, but this is counteracted in part by increased pancreatic activity, and, in part, by the strongly alkaline succus entericus which speedily neutralizes the acidity in the immediate vicinity of the intestinal walls and facilitates thereby not only trypsin digestion, but also sugar formation and fat absorption.

In the lower part of the ileum and in the ascending colon the lactic acid bacillus gives way to the colon bacillus and the acidity of the intestinal contents becomes less marked; by this change the albumin still present loses the protection afforded by the lactic acid fermentation and begins to undergo decomposition, with the production of alkaline compounds. This is at once an advantage and a menace, for while it permits the completion of trypsin digestion by rendering the reaction alkaline, it also permits the occurrence of toxic changes. Normally evacuation of the contents of the bowels removes the toxic substances before they are absorbed. In the intestinal contents of the breast-fed child the sugar residue from which lactic acid formation takes place is proportionately large; there is a considerable

amount of fat from which the colon bacillus forms fatty acids in abundance, and the albumin residue is extremely small. As a natural result the acidity is maintained throughout and the stools have an acid reaction regularly and a slightly sour odor. On the other hand the stools of a child fed upon cow's milk will usually be alkaline or neutral as a result of the albuminous decomposition spoken of above, although defective carbo-hydrate or fat absorption may alter this.

In both human milk and cow's milk the carbo-hydrate group is represented by milk sugar. This may be taken up directly in the stomach or in the small intestine, or it may be absorbed after being converted into galactose and glucose by the action of a ferment known as lactase, which probably exists in both the gastric juice and the succus entericus. A considerable part of the milk sugar, just how large is uncertain, is consumed by the bacterial growth with the production of lactic acid, as has been seen.

When in the latter part of the first year the starch-splitting ferments of the salivary glands and the pancreas become active, starch digestion is carried on just as in the adult, being initiated during the first period of gastric digestion by the ptyalin, which ceases to act as soon as the acidity of the gastric contents becomes marked, and completed in the small intestine by the amylopsin contained in the pancreatic juice.

The fats pass through the stomach unchanged, but in the duodenum they encounter the bile, the pancreatic juice, and the succus entericus and here their digestion begins. The part taken by the intestinal secretion is simply that of neutralizing the acidity of the chyme, thus greatly facilitating fat absorption. In the work of splitting the fats into fatty acids and glycerine and forming the extremely fine emulsion which is necessary for their absorption, the pancreatic juice is aided by the bile. Although the bile has a neutral reaction it affords the necessary alkali (obtained by the splitting of the salts of the biliary acids) for the saponification of the fatty acids set free by the action of the pancreatic juice, and these soaps in turn add their influence to that of the free fatty acids in the emulsification of the fats. The bile also accelerates the absorption of fats by moistening the mucous membrane. It has been found that a membrane moistened with bile allows fats to pass through much more readily.

In the form of an emulsion the fats themselves, together with the soaps and fatty acids, are taken into the intestinal cells through their finely striated borders, and thence pass into the chyle-vessels. In the beginning of these the fatty acids and soaps are combined with glycerine and again converted into fats which pass through the mesen-

teric glands into the lymph vessels and then into the venous circulation. In part the soluble soaps are taken directly into the blood flowing into the portal system. The fineness of the emulsion is of the greatest importance in its absorption—if it is too coarse the fat droplets will pass through the entire intestinal tract unchanged.

Absorption of the various food substances takes place throughout almost the entire length of the gastro-intestinal tract. From the stomach are taken up a small amount of peptone, a portion of the mineral salts, and some of the sugar. In the upper part of the small intestine the greater part of the total absorption occurs, here the taking up of sugar and the mineral salts is completed, while throughout its whole length and well on into the large bowel the absorption of water and of the products of proteid digestion continues.

While one may say in a general way that the fats absorbed pass into the chyle vessels and finally by the thoracic duct into the general venous system, and that the water, salts, proteids and carbo-hydrates enter the blood directly and are carried to the liver, the line of separation is not a sharp one, for we have seen that some of the soluble soaps enter the blood directly and a small proportion of the other food elements undoubtedly does find its way into the thoracic duct.

It seems probable that the whole length of the intestinal tract is not constantly active, one part works while another section rests, thus there is normally a reserve digestive capacity to call on in case of excessive ingestion of food or of difficulty in its digestion.

The relation between absorption and ingestion depends on the completeness of the digestive processes or upon the occurrence of fermentation and decomposition. When the amount of decomposable material, especially albumin, escaping absorption in the upper portion of the bowel, is large, the greater will be the field of activity for the organisms of decomposition.

As the constituents of human milk are very readily digestible, the absorption in the breast-fed child is almost complete. Uffelmann estimates that 99 per cent. of the proteid, 97 per cent. of the fat, and 90 per cent. of the mineral salts of the mother's milk will be absorbed by the infant. Of the sugar no trace is left in the feces, but the relation between the part absorbed and the part converted into lactic acid is still unknown, probably the latter is quite small.

When the child comes into the world the fat-splitting ferment in the pancreatic juice is only feebly active so that the stools at this period contain a larger proportion of the fat ingested than the figures just given would indicate, but development is rapid and in the course of a few weeks fat absorption becomes very complete.

The digestion of cow's milk is less perfect and, therefore, a somewhat larger proportion of the fat, proteid and salts escapes from the stools than when the infant is breast-fed. It goes without saying that the changes which occur as the child grows older and larger are gradual ones, moving toward the adult type fairly rapidly, but by a steady ascent, not by sudden leaps, and it should be borne in mind that they are of degree rather than of character. It is impossible to follow them step by step, for probably no two cases progress at exactly the same rate, but enough has been said to give a general idea of what takes place during this important period of development.

CHRONIC APPENDICITIS. REPORT OF TWO CASES WITH OBSCURE SYMPTOMS.*

BY L. H. PRINCE, M. D.,
OF PALMYRA, WIS.

In reporting the two following cases of appendicitis I do so because they so well illustrate a fact that is of frequent occurrence, but which is at the same time often overlooked—the presence of extensive and serious pathological lesions, the result of chronic appendiceal disease, with absence of or meagre array of definite symptoms pointing to the appendix.

Case I. A Southern single woman of 22, with negative family history, except that her father died of appendicitis 12 years ago.

Since childhood patient has been delicate and of neurotic temperament. She menstruated at 14, and has been failing in health ever since. While at college in November, 1899, she had a severe attack of what was diagnosed as inflammation of the right ovary. She made only a partial recovery from this, going back to college two months later. In February, 1900, she had a similar attack, and peritonitis was feared by the attending physician. This was followed by a number of attacks of short duration—of vomiting, constipation and general abdominal pain. In October, 1900, the right ovary was removed for cystic disease, the uterus ventrally fixed, a few small cysts of the left ovary cauterized, and the uterus curetted. The appendix was inspected at the time, appeared all right, and was left. The patient was in no way improved by the operation, and she became physically weak and most pronouncedly neurasthenic.

*Read before the Central Wisconsin Medical Society, April 28, 1903.

She was admitted to the Palmyra Sanitarium, July, 1902, presenting most marked and widespread evidences of nervous wreckage: insomnia, headaches, cardiac palpitation, cold dripping extremities, frequent cold sweats, exhaustion on the slightest exertion, backache and aches and pains in all parts of the body, inability to wait upon herself, and all the well-known psychic phenomena of profound neurasthenia. Her weight on admission was 93 pounds.

Physical examination was negative as to heart and lungs. There was some tenderness in the region of the left ovary, but pelvic examination was incomplete and unsatisfactory. The whole abdomen was somewhat sensitive on slight pressure, but deep pressure caused no pain or resistance, except in the right iliac fossa. A diagnosis of chronic appendiceal disease with recurring acute and subacute attacks was made, and operation advised. For various reasons operation was deferred for four months, the patient remaining under observation in the sanitarium during that time. In spite of the usual care and treatment of neurasthenia the patient made no permanent improvement of any kind. There were occasional attacks (two or three weeks apart) of from two to forty-eight hours' duration, of nausea, vomiting, and general abdominal pain, with increased right iliac tenderness, slight rise of temperature and accelerated pulse, during which all of the nervous phenomena were greatly exaggerated. There were times when no tenderness could be elicited, and at other times it was quite marked. At all times the nervous phenomena were out of proportion to the physical. Pulse has been at times irregular, but seldom rapid. Temperature usually normal mornings, and ranged from 98.5 to 99.6 afternoons. The pain in her back was always worse when the temperature was above normal. Bowels regular. Menses irregular, with no special change in above symptoms during period. During these months the patient remained for the most part a helpless, nervous, and physical bed-ridden wreck. On November 2, the patient was carefully examined by a visiting surgeon. At this examination there was no tenderness other than a universal hyperesthesia, and the result of the examination was negative throughout.

Operation, which had been advised a few months previously, and which had been under consideration by the family, was finally consented to, and was performed Nov. 6, 1902. The appendix was removed through a median incision. It was found adherent to the omentum and cecum, horseshoe in shape, 4½ inches long, quite thick and irregular in outline, and its vessels enlarged and tortuous. Two constrictions were found, dividing the appendix into three portions, the proximal and distal thirds being solidly obliterative. The central portion was dilated and contained about 2 drams of pus. A left ovarian cyst the size of a large orange, and intimately associated by adhesions with the broad ligament, overlooked at time of examination, was removed with the ovary. The patient made a good recovery from the immediate effect of the operation, and steady though slow progress toward recovery from her nervous symptoms. She left the sanitarium Feb. 5, 1903, three months after the operation, greatly improved and steadily gaining in every way. A letter recently received tells of very

few attacks of nervousness, some golf playing, etc., and gradual improvement of symptoms properly referable to her premature menopause.

Case II. Mr. H., American, locomotive fireman, 31 years of age, married, came to the Palmyra Sanitarium Dec. 24, 1902. Aside from the usual diseases of childhood he had always been well and strong until 1892, when he had a four or five weeks' attack of malaria. He remained well up to one day last October (1902), when he was suddenly seized, while at work shoveling coal, with pains all over his body, which soon became localized in the abdomen. The severe pains lasted but half an hour, but he remained away from work two days, but not in bed. He worked steadily after that, and remained apparently well with the exception that he was bothered with an almost constant, disagreeable, ill-defined uneasiness and pain, dull and dragging, not very severe at any time, involving the whole right side of the abdomen, a trifle more severe in the right hypochondrium, coming on two or three hours after breakfast. He was constipated, requiring pill medication for relief. The pain had never been acute until a few days prior to admission to the sanitarium, and of late he has found it more difficult to straighten up from a stooping position. There had been no vomiting or jaundice at any time, and no fever that the patient knows of, nor had he lost more than the two days mentioned. On examination the heart's action was somewhat labored, with a soft systolic murmur at the apex; pulse 58. Examination of the lungs was negative. Examination of the abdomen showed slight tenderness at McBurney's point on deep pressure only, and somewhat greater sensitiveness to slight pressure under the border of the right costal arch. Temperature normal, and examination of the urine negative.

Operation Dec. 27, 1902. The muscle-splitting incision was made, and later enlarged upward. The anterior wall of the cecum was firmly adherent to the abdominal wall at McBurney's point for the space of nearly an inch, after the separation of which it was necessary to repair a rent in the cecum involving the serous and muscular coats. A considerable area of omentum, partly adherent to the cecum, was thickened, highly congested, and in such poor condition that a portion of it was removed. The cecum was bent upward and backward, and firmly held in this position by adhesions. The appendix was buried completely in a mass of easily separated adhesions, and was felt to pass upward behind the colon as a long, thin, firm cord. Following this upward and gradually releasing it from its adhesions, its tip was traced to a point not far below the lower border of the gall-bladder. Several fine, strong, wire-like adhesions extended from the tip of the appendix to the under surface of the liver, the stomach, and the lower surface of the diaphragm. These were divided by scissors, without a ligature. The lumen of the appendix seemed to be very narrow, but not obliterated at any point. A few ulcerations were found, and there were many hemorrhagic spots in its mucosa. The length of the appendix in its fresh condition was eight inches. During the first week after operation, the patient's temperature did

not exceed 100; his pulse ranged from 56 to 76, and his general condition was excellent. The beginning of the second week, however, he developed, without a chill, a right-sided, circumscribed pneumonia of the lower lobe. He was not very sick, coughed very little, and the sputum for the most part was greenish, of bad odor, and filled with pneumonococci. His breath was very offensive. On the 11th day the pneumonia symptoms were rapidly subsiding; the patient was apparently in good condition, and the appearance of the wound satisfactory. On the 12th day, without a chill, the temperature rose to 102, pulse 86. The borders of the wound were indurated, and somewhat tender. There was a leucocytosis of 22,000. An opening was made through the old wound at its center and a large amount of greenish pus evacuated. The pus cavity was found to extend upward to the under surface of the diaphragm, and the pus contained large numbers of pneumonococci. The patient made a rapid and uninterrupted recovery.

A Case of Pleuritis Pulsans Dextra.—ERNST BENDIX (*Münchener Med. Wochenschr.*, May 19, 1903) reports a case of pulsating pleurisy of the right side and reviews the literature of the subject. Cases of pulsating pleurisy have been reported since 1640 but in the entire literature the author finds only three cases occurring on the right side.

Many theories have been advanced as to the causation of this condition. Bendix believes that the following conditions are essential:

1. There must be a powerful heart action.
2. The resistance of the thoracic wall at the seat of pulsation is usually, lessened, never increased.
3. The effusion must probably be encapsulated.

Pulsation of the left side is more common because the pulse wave has a shorter distance to travel and because the mediastinal space offers greater resistance to the transmission of the pulsation.

In the reported case there was a vigorous heart action, the effusion was encapsulated and pressing against the heart, which was pushed to the left, and the pus was thick, containing much fibrin and presented an almost solid tumor mass extending to the right side of the thoracic wall. The empyema had been of long standing, causing a stretching of the intercostal spaces and a lessened resistance of the thoracic wall. (J. K.)

WISCONSIN MEDICAL JOURNAL.

OFFICIAL ORGAN OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A Monthly Journal, published by the Wisconsin Medical Journal Publishing Co., and owned by and devoted to the interests of the Medical Profession of this State.

Original articles, Clinical notes, Correspondence, and Communications of interest to the Medical Profession are solicited. Reprints of articles contributed to this Journal will be furnished at cost price, but a number of copies of the Journal will be furnished contributors gratis. All manuscripts should be typewritten.

ARTHUR J. PATEK, A. B., M. D., Editor,
121 Wisconsin Street, Milwaukee.

Associate Editors.

CHAS. S. SHELDON, M. D., Madison.
HOYT E. DEARHOLT, M. D., Milwaukee.
OTTO H. FOERSTER, M. D., Milwaukee.
ALBERT W. MYERS, M. D., Milwaukee.

Collaborators:

Horace M. Brown, M. D.,	Milwaukee	U. O. B. Wingate, M. D.,	Milwaukee
Arthur J. Burgess, M. D.,	"	Chas. Zimmerman, M. D.,	"
Richard Dewey, M. D.,	"	Frank H. Edsall, M. D.,	Madison, Wis.
Louis Frank, M. D.,	"	W. E. Fairfield, M. D.,	Green Bay, "
Walter Kempster, M. D.,	"	Wm. E. Ground, M. D.,	W. Superior, "
William Mackie, M. D.,	"	Julius Noer, M. D.,	Stoughton, "
Solon Marks, M. D.,	"	Chas. W. Oviatt, M. D.,	Oshkosh, "
P. H. McGovern, M. D.,	"	L. H. Prince, M. D.,	Palmyra, "
Gilbert E. Seaman, M. D.,	"	H. Reineking, M. D.,	Sheboygan, "
Wm. H. Washburn, M. D.,	"	W. T. Sarles, M. D.,	Sparta, "

Annual Subscription, - - - $2.00. Single Copies, - - - - - $0.20.

Address all business communications to
M. M. TAYLOR, Business Manager,
709 Herman Bldg., Milwaukee, Wis.

Vol. II. JULY, 1903. No. 2.

EDITORIAL COMMENT.

PHYSICIANS OF WISCONSIN—ORGANIZE!

Reorganization of the profession of Wisconsin will not be complete until the physicians in every county of the state are banded together in strong county or district medical societies.

There can be no question of the benefits to follow such thorough organization. They have been repeatedly pointed out, and are well understood by every physician who has watched the recent activity of the American Medical Association and the various state and county

societies throughout the country. At the last annual meeting of the State Medical Society a Provisional Council was appointed, consisting of one delegate from each congressional district, whose duty it is to assist in the organization of societies in the several counties within his jurisdiction. The JOURNAL would urge upon physicians in counties in which no medical society exists, to correspond with their district councilor for information and assistance. The names of the members of the Council will be found in each issue of the JOURNAL at the head of the page devoted to State Medical Society proceedings. A strong effort on the part of the physician, and an occasional stimulus from the councilors must bring to the next annual meeting a county representation that will not only swell to goodly proportions the membership of the Society, but make successful the new plans for Council representation and government of the State Society.

THE PRESENT STATUS OF SURGERY OF THE STOMACH.

The article which we publish in the present number on the above subject is of great importance, not only on account of the eminence of the author but because it is a notorious fact that a certain number of cases of diseases of the stomach are particularly unsatisfactory and rebellious to any form of medical treatment. Dr. Mayo's experience has been very wide. Great advances in the surgery of any organ have been brought about only through opportunities to study the diseased conditions during life, and probably no man in the United States has had the opportunity to see as large a number of operations upon the stomach as Dr. Mayo.

While certain kinds of surgery of the stomach have been done for a number of years, it is only recently that sufficient data have been accumulated to enable us to form any judgment as to the results of the various operations upon this organ. Diseases of the gall tracts, the duodenum and the pancreas have been and still are confused with diseases of the stomach. It is only by the accumulated experience of a large number of operations such as Dr. Mayo has had the opportunity to observe, that one is able to differentiate between the various conditions and therefore place the surgery of the stomach on a sound basis. That the stomach can be dealt with as safely and with as much certainty as other abdominal organs has been demonstrated by Dr. Mayo. In the great group of cases in which the lesions are benign, wonderful results have been obtained, and while cancers have not given favorable results so far, there is no question that in the future, with an improved technic and an earlier diagnosis, we will obtain

very satisfactory results. As Dr. Mayo points out very forcibly, in the cases of cancer early operation is a pre-requisite, and in many cases, in order to make a correct diagnosis, an exploratory incision is necessary.

INFANT FEEDING IN THE SUMMER MONTHS.

With the advent of hot weather we again confront the problem of infant mortality and increased sickness of young children due to digestive diseases. The question is not so much one of treatment as of prevention.

The infant at the breast needs very little attention. Given proper clothing which protects it from chill at the same time that it is not overheated, sufficient water within and without, and regular hours of feeding, personal hygiene of the mother, consisting of cleanliness, proper exercise in the open air, no exhausting household duties, elimination of sources of worry, and simple, plain diet, it can safely rest in its natural advantages. When we take up the consideration of the artificially fed infant the question of proper milk supply enters into the problem.

In no country in the world has so much scientific thought and labor been given to this as in America, and as we look over the results it seems as though we were rapidly nearing the goal, and with the general and conscientious adoption of the methods suggested, pure and well preserved milk will be as common as poor milk has been in the past.

The growth of every science is marked in its early stages by methods cumbersome and impracticable and poorly adapted to general use. It has been so for many years in the matter of preserving milk for bottle-fed infants. The experiments of the United States Agricultural Department and the application of results to dairy practice have demonstrated that the ideal method of preserving milk indefinitely and furnishing a pure milk to cities and towns is one of simplicity itself; all that is insisted upon is strict cleanliness in milking and handling, and immediate cooling to a temperature below 45° F. By this method milk may be preserved in its natural state indefinitely, germ growth inhibited and kept below ten thousand to the cubic centimeter. A milk without germs is practically out of the question, nor are a few thousand to the cubic centimeter necessarily harmful. In demonstration of this simple method the Department of Agriculture at the Paris Exposition, in 1900, served milk over the counter which was bottled a week or more previously in Illinois, New

York or New Jersey. This milk had not been pasteurized, sterilized, nor treated chemically, but had only been subjected to refrigeration, and was possessed of its natural flavor and unaltered chemically or physically. So, given a milk, which when it enters the house, is fit to be fed to an infant, its future preservation seems a simple matter. Why burden a young mother who hardly knows how to read a thermometer, with, to her, troublesome and perplexing methods of pasteurization and sterilization. Have her make her milk mixture in previously sterilized vessels chilled by ice, divide into sterilized bottles and immediately place on the ice. By this method we devote our attention to the milk supply and avoid the false security of pasteurization and the chemical changes resulting from sterilization.

This method cannot at present be generally employed except in cases where the milk supply may be personally controlled, or is guaranteed. Except under specific conditions, as above, pasteurization must be employed to preserve the day's food before placing the divided mixture on the ice. If possible, where milk is served morning and evening, it will be of advantage to mix the food twice a day.

Impress upon the mother that milk, plain or modified, is solid food, and that the bottle-fed child needs a plentiful supply of water besides, in the intervals of nursing; and during the oppressive heat of summer nothing is more effective in conserving the normal tone and controlling nervous irritability than the plentiful application of tepid or cool water to the skin.

In the case of older children prophylaxis will be best applied by limiting the varieties of food supplied. Where possible to enforce, let the diet be liquid or semi-liquid in character, composed of proper proportions of proteids, fats and sugar for growth and development. The more simple and restricted the dietary, the simpler the problem. The greater the range of diet supplied a child, the greater are the chances of error and the more difficult is the location of the cause of trouble when trouble begins. Simplicity means safety.

MEDICINE AND THE LAY PRESS.

In an editorial under the caption "Not Guilty" the *Milwaukee Sentinel* of June 30th takes the editor of *American Medicine* to task for his criticism of the inaccuracies of lay journals in matters pertaining to medical subjects. Special reference is made to the recent incident in connection with Dr. Lorenz's visit, and the unnecessarily prominent notoriety accorded his work.

That the popularization among physicians of this country of the

celebrated Viennese surgeon's methods was desirable, there can be no question, and doubtless many people who would otherwise have been content to see their beloved ones remain untreated, were stimulated by the lay newspaper reports to present these crippled children for possible help. Granting all this, however, it is true, as the editor of *American Medicine* states, that when medical matters are under discussion so many inaccuracies are noted as to make the subjects of this comment often ridiculous, and placed in unenviably false positions. Consider for but one moment the operation for which Lorenz has become famous—his bloodless reduction of congenital hip dislocation. His method is in reality a modification of another's work—that of Paci. Lorenz was heralded as the first to perform the operation in this country, while, as a matter of fact, it has been done by various orthopedic and general surgeons ever since Paci and Lorenz first published their reports many years ago. American surgeons are progressive, their intercourse with European medical centres is free and constant, and whatever of foreign information there is new in medical or surgical matters finds a ready market in our own country. We copy and follow in the lead of foreign improvements, just as the foreigners follow advancements of ours, and the generous interchange of medical matters by means of publications gives no man property rights that are not another's.

The *Sentinel* says that "the inability of the members of the medical profession to agree among themselves is one of the fruitful sources of error in the newspapers, for the unimaginative reporter as well as his brother with the lively imagination invariably attempts to report correctly all medical items." This offers no excuse for faulty reports. Physicians may differ in their opinions as to the ultimate benefits of certain methods of procedure, and—while disagreeing—each one is simply viewing and arguing from the standpoint of individual experience, and he of the largest experience is entitled to give an opinion worthy of confidence. Thus it is quite as possible to obtain reliable information as it is to hazard a rough guess or quote from an unreliable source; in doing the latter no one is injured more than the physician who, in being represented, is in reality being misrepresented.

While it may not be feasible to employ a physician as an attaché of lay journals in the capacity of censor of medical matters, it is possible to submit matters deemed of sufficient popular interest to warrant publication to capable men who are unbiased, and who can and will supply information when it is requested.

Generally speaking, reputable physicians dislike being quoted in lay papers, this disinclination being in part due to the fact that they

are rarely correctly quoted, and partly that opinions are often requested upon matter that is simply food for the morbidly curious. On medical matters, instruction in which may be of general profit, there ought be no difficulty on the part of the lay journal in obtaining reliable information from reliable sources.

However, if the *Sentinel* errs in editorial judgment to the extent of quoting as authoritative the lying statement that the Lorenz method of bloodless surgery "differs from osteopathic surgery only in the number of treatments given in each case," how dare its editor hold up his sinful head and declare himself "not guilty" of the charges preferred by *American Medicine?* Long continued manipulation alone—the method practiced by the osteopathists—can never reduce a congenital hip dislocation nor correct a club foot deformity, and to class modern orthopedic surgery with osteopathy is another proof of the justice of the medical editor's contention.

If the *Sentinel* is really honest in its profession of respect for the medical man—its worthy editor does apply a healing salve to the wound he makes—then let it adopt a plan such as suggested above, which plan, if adhered to, will fill to overflowing his cup of praise, and render unnecessary words of censure on the one hand, and a feeling of resentment on the other.

SUBSIDIZED MEDICAL JOURNALS.

Not long ago, in scanning the advertising pages of a now defunct journal, we came upon an advertisement that we ourselves, though offered a tempting contract, had declined to consider. Why? Because the preparation—a cure all—offered to the medical profession, had been exploited in such a manner as to convince one that it gave nothing, save false hopes, in return for much cash. And this advertisement to our great astonishment we saw classed with other and legitimate preparations!

The WISCONSIN MEDICAL JOURNAL is desirous of obtaining all the legitimate advertisements possible, but will go to its grave sooner than stultify its pages with the advertisements of nostrums that can only be termed fakish humbugs.

Another matter demands a word. Does it not disgust the average reader to find, when perusing a column of reading matter supposed to give him real information (for this he pays his subscription fee) that he has been duped by the space devoted to this matter into reading a paid advertisement, cleverly placed to catch his eye, and so worded that the real character of the article remains undiscovered until the

end of the paragraph is reached? This may be considered good advertising, but it is an insult to the reader to compel him to wade through a mire of advertisements so placed as to make it difficult for him to distinguish honest contributions from paid articles.

We trust the JOURNAL will never be so hard pressed for cash as to find itself reduced to the necessity of selling its editorial and other reading columns. Commercialism is the ruination of honest thinking and of free speech, and such an invasion is so foreign to the principles of those in charge of this publication that our readers may feel secure that their rights will at all times be upheld.

NEW YORK MEDICAL JOURNAL AND PHILADELPHIA MEDICAL JOURNAL CONSOLIDATED.

The object lesson taught by the recently announced consolidation of the *Philadelphia Medical Journal* with the *New York Medical Journal,* offers a timely subject for comment. With his last breath the editor of the journal that has ceased to exist, says: "The reasons for this change are entirely administrative, but in announcing it the editor feels that it is only proper that he should state that in the period of two and a half years, during which the members of the present editorial board have conducted the *Philadelphia Medical Journal,* they have been actuated solely with the desire of conducting this Journal entirely in the interests of the medical profession and for the advancement of scientific medicine." And again "the members of the editorial staff in resigning their functions would simply call attention to the fact that they have been responsible for the editorial control of this Journal, and they relinquish their trust with the consciousness that they have discharged their duty with every effort to meet their literary and professional obligations."

Is not this a significant statement? One cannot escape the conclusion that there has been a clash, an absence of harmony between the business and editorial management, and that the sympathy which, if success be the aim, must be the bond of union between publisher and editor, was woefully lacking, and this to the discouragement of the editors, the detriment of the journal, and the dissatisfaction of high-thinking readers. With such a loss, why keep up a losing game?

We have nothing but praise to bestow upon the editorial management of the *Philadelphia Medical Journal.* The original articles always bore the stamp of strict editorial censorship of which many another journal might be proud, and the various departments originated in its columns and under the excellent management of well

known men helped to make this Journal a most excellent "purveyor of medical pabulum."

The *New York Medical Journal* needs no introduction, and the amalgamation of these two media of medical information must result in a most excellent and valuable publication.

We wish the *"New York Medical Journal and Philadelphia Medical Journal...Consolidated"* a long and successful career.

"EDDY"-OTIC WORSHIP.

Further discussion of "Eddyism" perhaps requires an apology, for the subject has lost its freshness; but the recent convention at Boston calls forth new wonder at the power and prevalence of this movement. Some 25,000 persons assembled at the various services, and 10,000 went to Concord, New Hampshire, to get sight of the high priestess of the cult. We read that hundreds of the disciples having failed to consider the needs of their "mortal" stomachs, were sent hungry away, and we marvel that the resources of the "Science" were not invoked to cure so light an ill. Surely a great opportunity was lost for "feeding the multitude" or abating their hunger by this modern system of thaumaturgy.

One may be a scientist and also a Christian, and yet not an Eddyite, but the word "Scientist" has come in common parlance to have a meaning of its own. We have a medical friend who told his patient to think he was going to get better and not worse, and reminded him that if there were two sick patients just alike in all respects except that one was cheerful and hopeful and thought he would recover and the other was a pessimist and a croaker and thought he would die, the former would have the better chance. The patient's reply was, "Now you're trying to work a 'Science' racket on me." And, in truth, the impression is common that the wonderful power of mind over matter is a monopoly controlled by this precious sect organized under the laws of Mary G. Baker Eddy, Czarina of this new "Concord (N. H.) School of Philosophy."

An "experience meeting" was held in Boston, and the cases presented included the healing of rattlesnake bites, tumors weighing thirty pounds, stone blindness, etc., etc. Not a single failure was reported!

The miracles were equal to any ever recorded, but no doubt still greater glories are in store; for Mrs. Eddy tells us that when we all come to "have faith as a grain of mustard seed" the power of "Science" will stop at nothing. Neither drugs nor dental plates nor

spectacles nor any other device of doctors will be needed when Eddyism has become universal. In order, however, that these more brilliant results shall be obtained we must *all* believe. This seems to be one difference between Eddyistic cures and those of the Great Physician, for He wrought His in the face of bitterest opposition and persecutions, not depending in the least upon the "atmosphere" around Him.

Allusion is made above to the report of a cure of a tumor "weighing nearly thirty pounds." Everyone would agree that the annihilation of such a growth by a process of thought or by spiritual healing must require most laborious mental efforts. To *think* a thirty pound tumor out of existence must be as difficult as to think a brass knob off a door or a bedstead, and the *mental strain* needs to be taken into account.

It has been our experience to meet first and last with a large number of cases where mental breakdown occurred in connection with such efforts at abolishing physical conditions by thinking they did not exist, and these cases will form the subject of a paper we hope to have in readiness at no very distant day.

We do not assert that this Eddyite craze is the *sole* cause of insanity, but it does serve in many cases as the *exciting* cause in persons of neurotic heredity and temperament.

NEWS ITEMS.

Enforcement of the "Baby Farm" Law.—The Health Commissioner of Milwaukee is taking steps toward the enforcement of the so-called "baby farm" law passed at the last session of the Legislature.

Copies of the law have been sent to every known keeper of a baby farm, lying-in hospital and home for infant children, and the department will from now on vigorously prosecute all cases of violation of the law that can be found.

The law makes it obligatory upon the keepers of such homes and hospitals to report to the health department before embarking in the business.

It is required that the birth of every child shall be reported to the health department within twenty-four hours after birth. The name of the mother and the exact age of the child shall be given. Every child taken in shall be reported, together with the names of those from whom it is received and the name and antecedents of every child leaving the institution shall likewise be reported.

The health department will send its agents on periodical tours of inspec-

tion and the keepers of such places are required to admit the agents of the department at all reasonable hours.

Regulation of Milk Supply in Chicago.— Effective regulations to insure a supply of pure milk for Chicago were recently passed by the city council.

The ordinance creating a milk and food division of the health department was adopted by a vote of 54 to 7, a few of the west side aldermen voting against the measure because, it is said, the milk dealers in these crowded wards did not like its terms.

"Skim milk," which has been the source of profit for many small dealers because it was sold as milk with the necessary amount of butter fat, is to be labeled in such an effective manner that there will be no chance for selling it as good milk. The cans containing skimmed milk are to be painted a bright red and labeled in black letters three inches high, "Skimmed Milk." The cleanliness of cans and other receptacles is to be rigidly enforced, a fine being provided for in nearly every section of the new ordinance.

The Pasteurizing Plants that Nathan Strauss of New York has established in that city as well as in Philadelphia and Chicago to provide pure milk at a minimum cost for the infants of the poor, have attracted the attention of philanthropically disposed citizens of Milwaukee. Considerable interest has been aroused and a plant may be established here.

The milk commission of the Milwaukee Medical Society reports progress in their work of inducing dealers to establish model dairies on the well recognized scientific lines. Agitation of these questions does good not only in the material results attained, but by educating the public out of the idea that "milk is milk" and into the belief that sometimes "milk is milk" plus dangerous impurities and therefore to be "handled with care," and taken as food only when there is a reasonable assurance of its purity and freedom from contamination.

Changes in College Faculties.— Dr. Thos. Fitzgibbon has resigned as Professor of Gynecology in the Wisconsin College of Physicians and Surgeons, and has been elected to the same chair at the Milwaukee Medical College.

Dr. Arthur J. Burgess has been appointed to the chair of Gynecology at the Wisconsin College of Physicians and Surgeons.

Dr. H. Reineking of Sheboygan will shortly remove to Milwaukee and take the chair of Clinical Surgery in the Wisconsin College of Physicians and Surgeons.

Dr. O. H. Foerster has been appointed attending physician to the dispensary for Diseases of the Skin, Dr. Hoyt E. Dearholt, Instructor in Orthopedic Surgery, and Dr. A. J. Patek, Lecturer on Physical Diagnosis at the Wisconsin College of Physicians and Surgeons.

Rush Medical College Secures Gift.—It is announced in the public press that the trustees of Rush Medical college have succeeded in raising a fund of $1,000,000, which will be tendered to the trustees of the University of Chicago, thus assuring the gift of $6,000,000 promised by John D. Rockefeller and the construction in Chicago of one of the most complete medical departments in the world.

The Christian Hospital Fraud, Chicago, to which reference was made in our columns last month, has fallen into the hands of the officers of the law. Dr. J. B. Murphy has made complaint against the perpetrators of the dishonest scheme for the fraudulent use of his name. Several of those who were interested in the development of the fraud are under indictment for fraudulent use of the mails. The *Chicago Record-Herald,* June 5, publishes the picture of A. C. Probert, the arch swindler in this deal, as convict No. 6843. He has "done time" in the Waupun penitentiary.

Wisconsin Board of Medical Examiners.— At the last meeting of the State Medical Society the following names were recommended to the Governor from which to select the two members of the Wisconsin Board of Medical Examiners to be appointed this year: Dr. H. B. Hitz, Milwaukee; Dr. J. W. Coon, Milwaukee; Dr. H. Gasser, Platteville; Dr. Julius Noer, Stoughton; Dr. W. T. Sarles, Sparta; Dr. J. V. R. Lyman, Eau Claire; Dr. J. R. Barnett, Neenah; Dr. Bennett, Beloit; Dr. H. Reineking, Sheboygan; Dr. Carl Feld, Watertown.

Waukesha Sanitarium.— The new building for the accomodation of 50 patients at Dr. B. M. Caples' Waukesha Sanitarium is nearly completed. The new structure is fire-proof, thoroughly modern, and equipped with all the latest improvements of an up-to-date institution for the treatment of nervous and mental diseases.

The Medical Society of Milwaukee County at its last meeting elected as members the entire membership of the Milwaukee County Medical Society. The Medical Society of Milwaukee County now numbers nearly two hundred and fifty.

The Office of Postoffice Physician in the cities of New York, Chicago, Philadelphia, Baltimore and Boston has been abolished by order of the Postmaster General.

St. Mary's Hospital, Beloit, containing twenty-five rooms for patients, and conducted by the Sisters of Charity, was dedicated July 2nd.

An Instructor in Human Anatomy has been added to the faculty of the University of Wisconsin.

St. Mary's Hospital, Oshkosh, is being enlarged by a $60,000 addition.

Dr. Bartholomew Bantly, of Milwaukee, has been appointed Surgeon to the Wisconsin Veterans' Home, Waupaca, in place of Dr. H. P. Merville, who resigns to resume practice in Milwaukee.

Dr. Herman Naumann, one of the oldest and best known practitioners of Milwaukee, a graduate of the University of Leipsic, died July 4th. Dr. Naumann served as a surgeon in the army during the rebellion and while actively engaged in practice was well known for his surgical skill. He had practically retired from practice several years ago.

CORRESPONDENCE.

BALTIMORE LETTER.

Gallstone Cases. Pancreatic Hemorrhage. Dissecting Aneurism. Carcinoma of the Cervix Uteri. Hemoalkalimeter. Solitary Tubercle of the Stomach.

During April only one meeting of the Johns Hopkins Hospital Medical Society was held. This was on Monday evening, April 6th. The meeting was opened by a discussion of some surgical cases by Dr. Halsted. He gave a brief review—first, of the *gall stone cases* operated upon in the hospital during the past year, and stated that fifty per cent. of them had been cases of stone in the common duct. Two cases which had given the signs and symptoms of gall stone clinically, were found on operation to be carcinoma. In one of these instances four carcinomatous lumps were found in the gall bladder which on palpation previous to the exploration had closely resembled stones.

Dr. Halsted spoke at length about a very interesting case of *pancreatic hemorrhage* in which the diagnosis had been made during life. The onset had been sudden with severe pain and collapse. The patient had recovered from the acute attack and had come to the hospital five weeks later. A mass could be felt which appeared to be retroperitoneal and extended from the crest of the ilium up under the right lobe of the liver. While under observation the patient developed symptoms of duodenal obstruction, and an operation for the relief of the condition was done. The patient died twenty-four hours after the operation.

Dr. McCallum reported the autopsy findings and exhibited the specimen. The duodenum was found adherent to a large mass that occupied a large part of the abdominal cavity. Upon opening the bowel it was found to be definitely narrowed but no erosion was found. The mass which was so readily palpable during life proved to be a large hemorrhage. It lay below the right kidney and adjacent to the colon and duodenum. The wall of the sac was hard and the cavity was lined by an old clot with a fresher clot or thrombus mass in the center. The kidney was free. The pancreas was free throughout most of its extent. The head of the pancreas lay behind the mass and in it was a cavity filled with necrotic material and blood. The pancreatico-duodenal artery was found to be extraordinarily tortuous and thickened. A small rupture was found in its wall which communicated directly with the cavity in the head of the pancreas. No fat necrosis was found. There was no sign of neoplasm.

Dr. McCallum had several other pathological specimens of special interest to demonstrate to the Society. One was a remarkable case of *dissecting aneurism*. The patient's death had not been directly due to the aneurism, septicemia being the direct cause of death. The diagnosis of aortic aneurism had been made, however, during life. The autopsy showed the aorta completely separated into two tubes, the split being in the media. The two tubes communicated above at the level of the ductus arteriosus and below at the bifurcation. Thus practically the whole vessel was converted into a double tube. Not much dilatation had taken place although there were signs during life of pressure on the recurrent laryngeal nerve. The new channel was completely lined by endothelium, showing that the condition was one of long standing.

The intercostal arteries had all been torn loose from their connection with the original lumen of the aorta and came off from the outer tube. A hole in the media alone indicated the original point of exit of each. This was true of the right renal artery also but the left sprung from the inner tube and traversed the cavity of the outer tube.

Another specimen exhibited was from a case of *carcinoma of the cervix uteri*, in which extensive metastases had occurred. Microscopic sections of the tumor showed large cells in which multipolar karyokinesis was taking place. Some of these cells contained as many as forty nuclei.

Dr. Dare of Philadelphia demonstrated a new clinical instrument of his own invention which is ready to be put upon the market. It is an *apparatus for the determination of the alkalinity of the blood*, and is made on the principle that when the blood is neutral in reaction the bands of oxyhemoglobin in the spectrum disappear. He titrates with a solution of tartaric acid of known strength and has tables to go with his apparatus giving equivalents of alkalinity so that the calculation is made very simple and easy. He claims great accuracy for his device and the advantage over other methods in the fact that so little blood is necessary. One small drop is all that is required —about the same amount as is necessary for a red blood count with the Thoma-Zeiss hemocytometer. If this hemoalkalimeter proves as valuable as a clinical instrument as Dr. Dare's hemoglobinometer, the profession will be greatly indebted to him for this additional means of learning more about the condition of the blood in disease.

The last number on the program was a short report of a case of *solitary tubercle of the stomach* by Dr. Van Wart. He claims that there is no similar case reported in the literature. (R. G. W.)

FOREIGN LETTER.

London, June 5, 1903.

It was well that our small party had sufficient foresight to leave Madrid and the alleged "International Medical Congress" before the last day, for I have been told that the crush was something fearful and the railroad employees knew, or said they knew, little or nothing about the reduced rates promised "los Congristas"; furthermore, the red tape necessary to have the tickets viséd when at last the information had been secured through the Bureau of the Congress, was very lengthy. Many of the members preferred to pay full ordinary fares to return to their homes rather than undergo the unnecessary delay and fight the *mañana* policy of the Spaniards. The French railroads were advertised to give half-rates, but such could only be obtained after much work and many visés and were almost as difficult to deal with as were the Spanish. We were fortunate in securing a "wagon lit" or "sleeper" to Barcelona, but the little "dinky car" and the rough road, together with the unsanitary condition of the toilets in the next compartment rendered a night journey very uncomfortable.

A couple of hours before our arrival in the port whence Columbus

set forth to rediscover the "Vineland" of Lief Ericson, and which even now does not bear either name but that of the map-maker Amerigo Vespucci, I had the opportunity to observe a marked case of hysteric coma in our fellow traveller—a lady of great musical ability, with an exquisite soprano voice—who, like many artists in such professions, is the unfortunate possessor of an unstable nervous system. She is subject to severe nervous headaches and despite the best medical advice was constantly taking various headache "cures," most of which contain acetanilid. Against my expressed advice, as the administration of bromide had not relieved her, she took several doses of one of these preparations, great depression of the heart resulting, with opisthotonos and coma. The administration of nitroglycerin finally brought her sufficiently out of the attack to allow of her being transported from the train to the "Hotel Grand des Quatre Nations" of Barcelona where we remained two days. A later attack was aborted by inhalation of nitrite of amyl.

Barcelona is one of the few business-like towns in Spain and has been made so by the influence of the French, English and American elements rather than by any ambition or wish of the Spaniard. I will pass over our visit of several days each to Marseilles, Monte Carlo, the Riviera, Ventimili, Genoa, Florence, Milan and Rome, as we were here ordinary sight-seers and I paid no attention to the medical features of these Latin districts, so disappointed was I with what I had seen in Spain, with the exception of the military hospital of Madrid of which I will write later.

I had a patient in Naples on whom I had operated nearly ten years before in Milwaukee for mastoiditis with subdural abscess, who made a reasonably speedy recovery with one operation. However, for some Italian reason, she had recently been operated upon four times for an otitis media with resultant spontaneous bursting of the drumhead and acute mastoiditis. This was a case in which twelve years ago I had advised removal of pharyngeal adenoids, which advice was not followed until the aural sequela and serious cranial affection had occurred, and the formidable opening of the skull had to be made. This patient likewise is the subject of interstitial nephritis, and yet ether had been administered for each of the four operations. Right here let me say that for none of the many operations that I have seen within the last three months in Europe, has the anesthetic, whether ether or chloroform, been administered in the safe manner I am accustomed to see it given in the States. Even to-day in London at the West Ham hospital, I saw a little weakling of a slum boy given nearly three ounces of chloroform during the progress of an advancement operation for squint, lasting twenty-seven minutes. Three times was

it necessary to resort to artificial respiration and twice to the administration of oxygen gas. The operator himself was very skillful and the operation well done, but I could not help referring to the "drop" method of chloroform administration in vogue with us.

In Zürich we were most hospitably entertained by Prof. Dr. O. Haab, the leader in Swiss ophthalmology, who, it may be remembered, was the guest of the American Medical Association last year at the Saratoga meeting and whom we also made an honorary member. Here the aspect of the medical profession changes to the German type, and the free air of the Swiss republic gives the physician more of a cosmopolitan character,—more like the higher type of the American medical man. Although the country is relatively poor, great attention is paid to education, particularly in the so-called Protestant cantons where every one seems busy and well to do. Thus, Zürich has a university of which it is justly proud, and its School of Mines is the best in all Europe. The medical department and hospitals are well situated on the hill overlooking the "Züricher See" and are well equipped. Naturally I was particularly interested in Prof. Haab's department and work. He has a well equipped stone building which cost something over five hundred thousand francs ($100,000) with beds for sixty patients and a department for ambulatory cases, in which about one hundred eye cases are treated daily. His lecture rooms and teaching facilities are most excellent, and I heartily recommend prospective ophthalmologists who wish the glaze of European study, to spend some months with him rather than work in Vienna, Berlin and some other places that are now so popular.

Real scientific work may be done in Zürich and there is less distraction in the way of "Wein, Weib und Gesang" than in almost any other large continental city. But when all is said and done we may look to America for the real thing in the shape of practical medical teaching. The student in Chicago, New York, Philadelphia, Boston, and even in Milwaukee gets better goods for his time and money than he does "abroad." This fact is more apparent to me now than it was in 1888 and 1889 when I got my first foreign "veneer" and I am glad to think it is almost all rubbed off. For a few branches, such as internal medicine and laboratory work, perhaps the student may do better abroad, but not for any of the specialties, except dermatology and sexual diseases—and then only for the mass of cases one sees—assuredly not as regards the care and the cure of the sick which should be the principal work of the medical man.

In Paris, Dr. Doyen seems to be the great attraction for the people, although from what I can gather he is not in such demand among the regular practitioners. He has a magnificently equipped hospital

and operative theater with electrical and special appliances for everything, even to the doors of the building—for when a visitor knocks, the door opens by apparently invisible hands. His armamentarium is large and his assistants are numerous. The crowds of the poor at the Salpetriére and other municipal hospitals continue as of old. In the latter I visited only the eye clinic of Prof. Lapersonne and the private clinic of Landolt, and saw some of the latter's work at his office, as well as that of the Parisianized American, Dr. Bull.

In London, Edinborough, Glasgow, Sheffield and Liverpool, the hospital facilities for the treatment of the poor are exceptionally extensive, for the English people are very liberal with contributions towards their support.*

An extremely incongruous condition as regards the care of the sick obtains throughout England; the pauper and lower classes have the opportunity of going into first-class and magnificent hospitals and are attended by prominent English physicians and surgeons without any expense to themselves, in clean airy wards and rooms; they are operated upon in modern surgical amphitheaters. The middle classes or even those of the upper stratum of society who need hospital facilities are obliged to go, as a rule, to what are called "Nursing Homes," or are operated on in less aseptic quarters in their own residences. Only a few of the prominent medical men have private hospitals that compare at all in modernity with those of our country. The public hospitals receive only charity cases and the average prominent physician and surgeon sees daily many times the number of charity cases in his public work, that he does in his private practice. The wages of the medical profession in Great Britain average much less than those of our own country, despite the fact that their average fees are higher.

*The Medical Charities of London.—*The Lancet* of Junue 6 includes a supplement in support of the Metropolitan Hospital Sunday Fund, which shows at a glance the vast amount of work that is being done by the hospitals and dispensaries of greater London. One is astonished to find that there are 204 of these in all, 31 general and 60 special hospitals, 57 cottage hospitals and Convalescent Homes, and 56 Dispensaries. In 1902 these treated 128,974 inpatients, and 5,025,058 out-patients, and 406,108 accidents and emergencies. In all the institutions there were 8,692 deaths during the year. They received from the Hospital Sunday Fund award, $289,045. The progress of this fund is shown in a table in which the total fund in 1873 was $138,500, rising fairly steadily to $313,345 in 1902. How many of these millions could have paid for the medical service would of course be mere guessing, but the constant increase of the total amount of such charitable work, the growing difficulty of securing voluntary support, the doubts and injustices contingent upon "bad years" bring always nearer the thought that some more stable manner must be devised of meeting the difficulty.—(*Amer. Medicine.*)

A guinea a visit (a little over $5.00) is what the prominent London man receives from every private patient, but he sees but few a day.

As our readers know, London has many hospitals. I visited Guy's hospital, which has undergone some changes and repairs since my previous visit of sixteen years ago, but it needs as many more. I also went to the New Moorfields (Royal London Ophthalmic Hospital) which has perhaps the largest number of eye patients in the world. I was amazed to see that the larger proportion of these cases was composed of foreigners of the lowest classes. England receives the dregs of immigration—the people who cannot go to America on account of our more stringent immigration laws. This hospital has been recently built and cost a good deal of money, but there is much waste space and it is hardly a model building as regards the operating rooms upon which ten thousand pounds were spent, and in which the light is exceedingly poor and the space for operating rather cramped.

Prof. Haab, of Zürich, met me in London as Mr. Worth had arranged a demonstration of his methods of curing squint and the restoration of the vision in squinting eyes without operation, with which work my associate, Dr. Black, and I have had considerable experience during the past year. We can now say with certainty that in but few cases is it necessary to operate in strabismus, provided the child is brought to an oculist within the first year of its life; the loss of sight in the more deviating eye may be absolutely prevented by orthoptic treatment. We do not operate on children for strabismus, as a rule, and find that the eyes straighten out in a very large proportion of the cases by methods of treatment similar to those advocated by Mr. Worth.

In Edinburgh the general hospital is crowded with a mob—not of Scotch and English—but, as in London, of aliens. Here I attended the eye clinics of Mr. Berry. Much might be said of the large number of municipal hospitals in Edinborough and in Glasgow, and about the model of all the European hospitals with which I am acquainted, the Glasgow Royal Infirmary, on which over a million dollars has already been spent and which is adding more buildings. This is presided over by Dr. McIntosh, the principal surgeon being Sir Hector Cameron, both genial gentlemen and scientific workers. The three operating theaters of this hospital are well fitted with modern appointments. There are many parish hospitals in Glasgow of large size and with modern equipment. I was principally interested in the Royal Glasgow Eye Infirmary and the Royal Eye Hospital, the former being under the care of Dr. A. Maitland Ramsay. The Scotch hospitality extended me here was most liberal, but I could say the same of other English associates with whom we stopped. Dr. Ramsay has perhaps the most complete arma-

mentarium for special work of any place in Europe. Sheffield is a large manufacturing town of the same character as Pittsburg, or Milwaukee; it is usually smoky and unattractive, except from an economical standpoint. My idea of visiting here was to study the eye accidents of the iron and steel trades, and the means of prevention thereof, as advised by the eye surgeon, Simeon Snell, to whom I had been authorized to extend an invitation from the Section on Ophthalmology of the American Medical Association to come to the 1904 meeting at Atlantic City as its guest and to deliver an address. He has accepted this invitation and the ophthalmologists of this country will do doubt extend to him the warmest welcome and courtesies. The general hospital here owns a large amount of city lands and is located in an open space. It comprises a number of buildings, the surgical portion being most modern, and Mr. Snell's clinic being an enormous one, averaging two hundred and fifty eye patients a day. His own operating theater is the most gorgeous that I have ever seen, the walls being lined with onyx.

Here the odd condition likewise prevails of the pauper alien being received and treated in the palatial hospital much better than he ever before experienced, while the private patient has to go to the dingy "Nursing Home" or the private hospital, supported only by the physician who runs it and necessarily not to be compared with that paid for by the public.

In Liverpool, the Royal Hospital has beautiful wards and fine operating rooms; they endeavor here to run a number of clinics, but in extremely cramped quarters, as it was not originally intended for outside patients. Dr. Bickerton is the principal oculist here and is very American in his methods and appliances. He gets most of his instruments from America.

In all these hospitals I was somewhat surprised to see well known surgeons and specialists work among a dirty crowd of the lowest classes of people in their ordinary street clothes, go to the operating room, perform a perfunctory wash up, and do delicate and extensive surgical operations in the same coat with which they go to their homes and attend to their private practice. We would hardly allow such things here.

Despite the many criticisms that I have made regarding the medical profession and people over the water, still I consider that medical studying and visits abroad are of great importance to broaden out the physician's education, but they should not to be undertaken before he has studied with the prominent American teachers, who are, to my mind, in most things far ahead of those of the old country.

H. V. WUERDEMANN.

THE STATE MEDICAL SOCIETY OF WISCONSIN.

ORGANIZED 1841.

Officers for 1903-1904.

F. E. WALBRIDGE, Milwaukee, President.
JAMES MILLS, Janesville, 1st Vice-Pres. C. C. GRATIOT, Shullsburg, 2nd Vice-Pres.
CHAS. S. SHELDON, Madison, Secretary. S. S. HALL, Ripon, Treasurer.

Provisional Councilors.

1st Dist., J. G. Meachem, - - - - Racine.
2nd Dist., J. S. Walbridge, - - - - Berlin.
3rd Dist., C. S. Smith, - - - - - Elroy.
4th and 5th Dist., G. A. Kletzsch, - Milwaukee.
6th Dist., H. Reineking, - - - Sheboygan.
7th Dist., W. T. Sarles, - - - - Sparta.
8th Dist., J. F. Pritchard. - - Manitowoc.
9th Dist., T. J. Redelings, - - Marinette.
10th Dist., J. M. Dodd, - - - - Ashland.
11th Dist., E. L. Boothby, - - - Hammond.

Next Annual Session, Milwaukee, June, 1904.

The Wisconsin Medical Journal, Official Organ.

SOCIETY PROCEEDINGS.

MILWAUKEE MEDICAL SOCIETY.

Meeting of June 23, 1903.

The president, Dr. A. J. Burgess, in the chair.

Dr. L. Boorse made a short verbal report for the Milk Commission, stating that a contract had been made for certified milk with Mr. Kieckhefer; that stables were being built and preparations for a herd of 180 cows were being made.

Dr. W. H. Neilson reported a case in which total blindness and an ataxic gait following a febrile attack improved immediately under the administration of the iodide of potassium.

Dr. G. E. Seaman reported a case of probable brain tumor with total blindness, double optic neuritis and retinal hemorrhages.

Dr. A. J. Burgess demonstrated a beautiful specimen of brain tumor, at the same time bringing out the clinical history. Drs. Seaman and Beffel took part in the discussion.

Dr. D. J. Hayes reported a case of cerebral syphilis treated previously for eye symptoms before coming under his care, which cleared up under anti-syphilitic treatment.

Dr. Neilson reported a case of a tumor the size of a hickory nut, lying on the cribriform plate which gave rise to severe orbital neuralgia.

Dr. Burgess recalled several head cases, including two of echin-

ococcus cysts, in one of which the early symptom was a spasmodic wryneck; a tumor of the hypophysis, and a brain abscess.

Dr. L. F. Jermain reported a case in which a French catheter with stylet had been inserted into the vagina of a woman to produce abortion and had been removed some weeks later from a sacral sinus.

WAUKESHA COUNTY MEDICAL SOCIETY.

A large number of physicians met at Waukesha, June 2, and organized a county society, with Dr. Byron M. Caples, Waukesha, president; Dr. Henry B. G. Nixon, Hartland, vice-president; Dr. Albert J. Hodgson, Waukesha, secretary; Dr. Margaret Caldwell, Waukesha, treasurer, and Drs. Caples, Nixon and Hodgson delegates to the State Medical Society.

DODGE COUNTY MEDICAL SOCIETY.

The regular meeting of the Dodge County Medical Society was held on Monday, June 15, 1903, at the Maple Shade Hotel, Minnesota Junction, Wis. The new constitution and by-laws for county societies as sent out by the State Society, were adopted with slight modifications.

The election for officers to serve until February next resulted as follows: Dr. E. M. McDonald, Beaver Dam, president; Dr. A. F. Schoen, Mayville, vice-president; Dr. H. B. Sears, Beaver Dam, secretary; Dr. J. A. Clason, Neosho, treasurer; censors, for three years, Dr. W. E. Hallock, Juneau; for two years, Dr. George Dewey, Burnett Junction; for one year, Dr. William Hipke, Hustisford.

No regular program was followed.

G. F. MESSER, Secretary.

JEFFERSON COUNTY MEDICAL SOCIETY.

At a meeting held at Watertown on June 15, the Jefferson County Medical Society was organized. Dr. William W. Reed, Jefferson, was elected president, and Dr. Charles E. Lander, Johnson Creek, secretary.

BRAINARD MEDICAL SOCIETY.

The program for the meeting of the Brainard Medical Society to be held at the Milwaukee Hospital on Wednesday, July 8, is as follows:
Diagnosis of the Position of the Foetus in Utero.....Dr. Wm. Scott
Management of the First and Second Stages of Normal Labor...
.....Dr. G. A. Heidner
The Third Stage of Labor.....Dr. B. McShane
Subject for Discussion.....Meningitis
Discussion will be opened by Drs. Neilson, Blank and Faber.

BOOK REVIEWS.

ANESTHESIA AND ANESTHETICS GENERAL AND LOCAL—FOR PRACTITIONERS AND STUDENTS OF MEDICINE AND DENTISTRY. By *Joseph M. Patton,* M. D., Chicago, Professor of Physical Diagnosis and General Anesthesia in the College of Dentistry of the University of Illinois; Professor of Diseases of the Chest in the Chicago Policlinic; Associate Professor of Medicine in the Medical Department of the University of Illinois, Chicago.—Cleveland Press.

The past ten years has seen a very decided change in the attitude of the surgeon toward the anesthetist. The opinion appears to have been that any one was fully competent to perform the service of anesthetist. Students and nurses were commonly assigned to this duty, notwithstanding the fact that accidents and fatalities are not infrequent in the operating room. For the proper discharge of the duties of anesthetist, knowledge and skill are absolute prerequisites. This fact is being more and more widely recognized, and of late there has been a strong tendency, not alone in hospital but also in private practice, to pay more attention to the qualifications of the anesthetist.

It falls to the lot of every practitioner of medicine to administer anesthetics more or less often, and it is therefore important that he should inform himself on the general subject of anesthetics both general and local, their physiologic action, their dangerous effects on particular organs, conditions which may influence the choice of drugs, idiosyncrasies, methods of administration, precautions to be observed, treatment of accidents, etc. While there is to be found scattered here

and there in the literature more or less information on these subjects, students of medicine, as well as practitioners, need this information in a handy and compact form, and the volume before us fulfills this requirement. The work is manifestly the result of careful literary study, mature deliberation, ripe experience and skill, and in it the student will find embodied the most recent conclusions of science as to the various drugs used for the purpose of inducing anesthesia. He will find judicious counsel in the selection of the anesthetic in given cases and classes of cases, and he will find a most interesting chapter on the history of the discovery and early experience in the use of anesthetics.

The chapter on nitrous oxide will be found specially valuable to the dentist, and that portion of the book treating of spinal anesthesia will place the reader in possession of the most recent knowledge on this important subject. (W. H. W.)

HERMANN VON HELMHOLTZ. *Leo Koenigsberger,* Heidelberg. Volume II., 383 pages, with two portraits, and Volume III., 142 pages with four heliogravures and facsimile letter. Braunschweig, Friedrich Vieweg and Sohn, 1903.

In the March number of the JOURNAL we reviewed the first volume of this excellent biography of von Helmholtz, which is of the greatest interest to the whole scientific world and large circles of educated laymen. In the second volume the exceedingly productive activity of von Helmholtz as professor of physiology at Heidelberg from 1861 to 1871, and as professor of physics at Berlin from 1871 to 1888, is described. A table of contents of seven pages gives, in chronological order, the titles of the vast array of scientific works published by von Helmholtz during this period. In 1863 appeared his famous book on perception of sound as a physiological base for the theory of music, a model of exhaustive and, in the best sense of the word, popular representation of the subject, with an abundance of original investigation and entirely new facts. In 1867 the first edition of the hand-book of physiological optics "the bible of the scientific ophthalmologist" was completed. Gradually von Helmholtz was, by the nature of his works, led into purely physical investigations, and in 1871 was appointed professor of physics in the University of Berlin. The negotiations between von Helmholtz and the Prussian Government preliminary to this appointment, and the reports of the philosophical faculty of Berlin, given in extenso, are very interesting. They show how the celebrated physiologist was universally considered as the greatest physicist whom the largest university was eager to gain for the foremost chair of

physics in Germany. Also the correspondence of v. H. with du Bois-Reymond, Ludwig, Donders, Lord Kelvin, his famous pupil H. Hertz, and others, presented in this volume, is of the greatest interest for the appreciation of the eminent man and investigator. Then again we read parts of his speeches held at important occasions, e. g., at the 500th anniversary of the University of Heidelberg, during his rectorate of the University of Berlin, and at the Ophthalmological Congress at Heidelberg, when the von Graefe medal was presented to him. A portrait of v. H. by von Lenbach, made in 1884, and a pastel by von Lenbach, made in 1894, are excellently reproduced in heliogravures. From the now following History of the foundation of the Physico-Technical Institute at Charlottenburg by Werner von Siemens, we learn how the latter's choice for president had been von Helmholtz, who, in that position, would be enabled to devote himself exclusively to scientific researches, being freed from other duties naturally connected with his professorship.

The third volume contains the biography of v. H. while in that capacity, from 1888 up to his death September 8, 1894. In 1890 v. H. published the first report of the Physico-Technical Institute, which shows what an immense amount of work had been done by him and by others under his supervision. Besides meteorologial and electro-dynamic investigations he again had taken up physiological researches while preparing the second edition of his hand-book of physiological optics from 1885 to 1894. His autobiographical remarks at the celebration of his 70th birthday, the address of the Academy of Berlin at the 50th anniversary of his promotion as Doctor of Medicine, his visit to the United States as commissioner of the German Empire for the International Electrical Congress during the World's Fair at Chicago, his and Mrs. von Helmholtz's letters, describing their impressions of this country, are exceedingly interesting. An apoplectic stroke prevented v. H. from delivering his address "On Lasting Forms of Motion and Apparent Substances," before the Congress of German Naturalists and Physicians in 1894 at Vienna, a part of which is given here. His death occurred September 8, 1894. The commemoration, celebrated in the Singakademie, at the instance of the Physical and Physiological Societies of Berlin, the unveiling of the statue of von Helmholtz at the entrance of the university, with an extract of the ovation held by Waldeyer, are narrated. The author quotes the following words of Lord Kelvin from his short summary of von Helmholtz's works: "Of the whole of Helmholtz's great and splendid work in physiology, physics and mathematics, I doubt whether any one man may be qualified to speak with the power which knowledge and under-

standing can give; but we can all appreciate, to some degree, the vast services which he has rendered to biology by the application of his mathematical genius and highly trained capacity for experimental research to physiological investigation."

We have nothing but words of the highest praise for this beautiful biography, fully worthy of the great man of whose scientific achievements and whole life it gives a thorough and splendid picture. Two heliogravures represent portraits by von Lenbach made in 1894, one the bust of v. H. by A. Hildebrand, 1891, and one the portrait of Mrs. Anna von Helmholtz, 1895. A facsimile letter of von H. to his father, dated December 17th, 1850, is appended, which is of especial historical interest, as in it v. H. mentions, for the first time, his invention of the ophthalmoscope. The handsome external appearance of the three volumes corresponds with the superiority of the work. (C. Z.)

CURRENT LITERATURE.

MEDICINE.

W. H. Washburn, M.D., Jos. Kahn, M.D., L. F. Jermain, M.D., A. W. Myers, M.D.

Therapeutic Inoculations of Bacterial Vaccines.—A. E. WRIGHT (*Brit. Med. Jour.*, May 9, 1903) points out that the principle of serumtherapy, that is, the idea of transferring to patients already the subjects of bacterial infection immunizing substances withdrawn from animals vicariously inoculated, appeals in a very forcible way to the medical mind by the fact that it promises a rational treatment of all bacterial diseases, and by the fact that it has fulfilled that promise in the case of diphtheria. The prestige which it has derived from this signal success has led to the use of serumtherapy in connection with almost every bacterial disease with the result that it has almost everywhere failed to do appreciable good while positive harm may follow. In default of an active production of immunizing substances on the part of the animal vicariously inoculated, the sera which are drawn off will inevitably possess the toxic properties of the vaccines originally inoculated.

He asserts that there is in connection with every immunization process a sequence of negative and positive phase, during the first of which resistance is lowered, followed in case the inoculation is successful by the maintenance of a higher base line of immunity. The inoculation of excessive doses may result in the undue prolongation of the negative phase, while the inoculation of a series of doses of a vaccine may cause the production of a cumulative negative phase. The cumulative positive phase which is sought can be achieved only when the successive doses are properly adjusted and interspaced.

The success of serumtherapy in diphtheria and its comparative failure in other diseases is explained by the fact that in the first case we are able to secure the elimination of all negative phase blood and to induce in the vicariously inoculated animals a cumulative phase of absolutely phenomenal dimensions.

In the case of patients who, though suffering from localized bacterial invasions, are possessed of a considerable balance of resisting power, it is possible without risk to undertake therapeutic inoculations of bacterial vaccines, provided always that the results are controlled by subsequent blood examinations. The success in each case must depend upon the power of response possessed by the individual. This power may fail in some particular patient or in connection with some particular bacterial infection but success will almost certainly be achieved in the case of simple staphylococcus infections occurring in the young and robust and very probably in certain coli infections as well. (A. W. M.)

Pernicious Anemia.—ANTON KROCKIEWICZ (*Wiener Klin. Wochenschr.*, May 7, 1903) reports a case which was under his care for fifty days, in which the clinical history and autopsy demonstrated the presence of progressive pernicious anemia, but repeated examinations of the blood showed variations from the conditions usually considered diagnostic of this disease. Normoblasts and megaloblasts were never found, poikilocytosis was slight, the red blood corpuscles showed a diminished quantity of hemoglobin and polychromatophilia was not well marked.

When first seen there were 460,000 red blood cells and 6,000 leucocytes per cubic millimeter, and 25 per cent. of hemoglobin. The number of red blood cells was reduced to 240,000, the leucocytes to 1,600 and the percentage of hemoglobin to 9 at the time of death. Aside from the progressive loss of strength and edema, the only symptoms were some digestive disturbances. The autopsy showed intense anemia. There was no fatty degeneration of the heart, liver, kidneys or blood vessels. The bone marrow was a bright red and there was some atrophy of the glands of the stomach and intestines.

The author believes that his case strengthens the theory of Grawitz that the diagnosis of pernicious anemia depends more upon the clinical history than upon the microscopical examination of the blood. (J. K.)

A Case of Myelogenous Leukemia, with Several Unusual Features.—CHAS. E. SIMON (*Am. Journal of Med. Sciences*, June, 1903) reports a case of spleno-myelogenous leukemia which presents several points of interest. The patient, a painter, 42 years of age, first came under observation in October, 1900. He had never been sick before except for several attacks of dysentery. After these attacks he recovered his health very slowly. When first seen his complaint was of mucus in his stools, and general lassitude. He had lost 15 lbs. in weight. He improved somewhat, under treatment, and reported in January, 1901, that he was feeling quite well. At this time he presented a very marked pallor and the blood examination showed only 40 per cent. hemoglobin and 1,350,000 erythrocytes. A differential count of the leucocytes

showed 6 per cent. of neutrophilic myelocytes, but the number of leucocytes was not increased. The patient became markedly anemic under observation and steadily declined in health, dying 17 months after anemia was first noted. His only complaints were of progressive weakness and shortness of breath on exertion.

Only after several months' observation did the spleen become enlarged. It gradually increased in size until it reached the umbilicus at the end. There was little glandular swelling until toward the end. He developed gangrenous stomatitis in June, 1902, and died on the 22nd, comatose. No autopsy.

From January, 1901, until the death of the patient frequent blood examinations were made. At first there was no increase in the leucocytes. These gradually increased and toward the end the ratio of erythrocytes to leucocytes had fallen to 1 to 16.6. Neutrophilic myelocytes were present from the first and steadily increased. Toward the end they diminished but did not fall below 25 per cent. The polymorphonuclear neutrophiles steadily diminished as did also the small mononuclears. The large mononuclears increased and were finally as high as 54.8 per cent. Mast cells were absent at first but later appeared and increased toward the end. Only two eosinophiles were seen in all the examinations made. Nucleated reds were present throughout the disease but more numerous at first.

The special points of interest in this case, which do not correspond to the characteristic picture of myelogenous leukemia as laid down by Ehrlich are: (1) The absence of leucocytosis until late in the disease; (2) Absence of eosinophiles; (3) Low percentage of mast cells at first; (4) Late development of enlarged glands and spleen: (5) Predominence of large mononuclear non-granular cells late in the disease. (W. H. W.)

The Diagnosis of Diseases and Functional Activity of the Kidneys.—PROF. H. SENATOR (*Berliner klin. Wochenschr.*, No. 21 and 22, 1903) details modern methods of diagnosis of diseases of the kidneys and the means of determining the functional activity of these organs. The diagnostic measures at our disposal are divided into two groups—the first composing all methods of directly examining the kidneys and their secretion, and the second all other organs or systems affected by disturbed kidney function. Every systematic examination of the kidneys should begin with inspection of the region, followed by careful palpation. Percussion is considered of doubtful value in the diagnosis of disease of these organs. In examination of the urine he dwells upon the importance of systematic procedure. The temporary presence of albumin in the urine after forced marches, cold baths and meals rich in albuminous foods is considered physiologic. Albumoses and especially deutero-albumoses are found in the urine in infectious diseases, also in connection with albumin, preceding or following the same.

Of greater importance he considers the presence of Bence-Jones bodies in the urine as indicative of myelomatous or sarcomatous disease of the bones.

Nephritis may exist without the presence of casts in the urine. Casts are the product of disturbed or altered function of the epithelium of the uriniferous tubules and not, as was formerly believed, coagulated albumin from the glomeruli. For this reason casts may be entirely absent in the

chronic interstitial forms of nephritis. Considerable importance is attached from a diagnostic standpoint to the presence of mononuclear leucocytes in the various affections known as "morbus Brightii," while in pyelitis, cystitis, urethritis, etc., the multinuclear forms predominate.

Cylindroids are most often found in desquamative forms of nephritis. In renal hemorrhage the red cells appear fragmented and more or less devoid of color, while in hemorrhage from the rest of the tract they are well preserved in outline and color.

The determination of the molecular concentration of the urine is of diagnostic value only when its valenz value according to H. Strauss is established. This is done by multiplying the total quantity of urine passed in twenty-four hours by the freezing point of the urine. If the total quantity is 1500 and the freezing point is 1 degree the valenz is 1500. This, however, is subject to considerable variation under normal conditions. It has been established that whenever the valenz value of urine falls below 800 the functional activity of the kidneys is below normal.

The functional activity of each kidney can be determined by obtaining the urine separately by means of the ureteral catheter and applying the following tests:

1. The patient is made to drink a large quantity of carbonated water within fifteen to twenty minutes. It will be seen that the normal kidney will secrete urine in larger quantities than does the diseased organ. 2. The determination of the molecular concentration of urine of each kidney, the percentage of sodium chloride and nitrogen. 3. The phloridzin test. After subcutaneous injection of one-half centigram of phloridzin, sugar will appear in the urine from the healthy kidney in from one-half to three-quarters of an hour.

An increase of the molecular concentration of the blood serum or transudation beyond normal limits is considered of value in the diagnosis of renal insufficiency. The depression in the freezing point of normal blood runs from 0.54 to 0.59. The normal concentration of the blood is maintained chiefly through the activity of the kidneys, and if their activity is diminished the molecular concentration increases and the freezing point is lowered to 0.60 or even less. (L. F. J.)

PEDIATRICS.

T. H. Hay, M.D., R. C. Brown, M.D.

Clinical Results with Antistreptococcus Serum in Scarlet Fever.—Louis Fischer, of New York (*Medical Record*, March 7, 1903), cites the conclusion of Baginsky and Sommerfeld that the streptococcus is a distinct etiological factor in scarlet fever. Aronson's serum was made from the cultivation of germs taken from a child with scarlatinal angina; he also utilized germs taken from the bone marrow of a child that died of scarlet fever. The serum was first successfully tried on animals. He cites Aronson's conclusion that as long as streptococci are found in the blood of the animals there was therapeutic indication for the use of the streptococcus serum. Aronson maintains that the serum has no direct specific action on the streptococcus, but there is something else in the animal body in addition to the serum which

stimulates cell activity and produces both immunizing and healing action. He gives the summary of the results in Baginsky's cases in which there were three deaths in fifty-eight cases. Fischer reports two cases of his own, which made good recoveries, in which he used the serum. He says that it is too early to formulate definite conclusions, but that the clinical results are striking. The effect on the temperature showed that the serum did inhibit bacterial products and the necrotic membranes in the throat seemed to melt away. The temperature descended by lysis. He feels warranted in indorsing the view expressed by Baginsky advocating this new serum in the treatment of scarlet fever. (R. C. B.)

The Occurrence and Mortality of Typhoid Fever in Infants and Children.— HENRY KOPLIK (*Archives of Pediatrics*, May, 1903). It is now generally acknowledged that typhoid fever can be conveyed from the mother to the fetus through the placenta, and in a large number of cases causing miscarriage. When carried to full term the child is born infected with the disease, and dies soon after with symptoms closely resembling a sepsis of the newly born. The disease runs an atypical course—the classical symptoms being absent, the infection of a hematogenous character, and the mortality very high.

Typhoid occurs later in infancy, up to two years, without a doubt. Henoch reports nine cases of typhoid in infants and children under two years in a series of 381 cases. Some of the cases in older literature are to be doubted owing to the lack of laboratory methods to confirm the diagnosis, but the exact methods we now possess establish the contention of the earlier writers that it does occur below two years, though not with the frequency of a later period of childhood. A sufficient number of cases have not been diagnosed by our present methods to establish the relative frequency of the disease below two years as compared to later periods. Koch, in studying lists of absentees from school in one village, found 72 cases of typhoid, only eight of which had been diagnosed as typhoid, the rest being diagnosed and treated for other maladies.

The mortality below two years, the author says, cannot as yet be definitely stated, but is, he thinks, larger than is generally appreciated. Griffith collected a number of cases below two years and shows a mortality of 50 per cent. Above the second year the mortality diminishes. Curschman shows a mortality of only 4 per cent. between two and five years. Marfan encountered a mortality of 50 per cent. in early childhood. Stowell, in four cases under two years, did not lose a case. Ashby and Wright, in 592 cases, had a mortality of 8 per cent.; Comby, in 250 cases, 7 per cent.; Curschman, in a larger number of cases in 1886, only 7.3 per cent.; in 1887 6.8 per cent. American authors make the mortality low. Holt collected 2,603 cases and found a mortality of 5.4 per cent. The author's own experience does not support the theory that typhoid fever is always a mild disease in children from the ages of two to ten years. In 1900 and 1902 his mortality was 3 per cent.; in former years in the same service it mounted as high as 10 per cent. The author's general conclusion is that the mortality varies in different epidemics and shows very slight variation from the percentages shown by adult cases. In mild epidemics the mortality varies from 6.6 per cent. to 13 per cent. from

the ages of two to ten years, whereas in the adult the percentage is not much higher. Children in severe epidemics are subject to a mortality of 30 to 40 per cent. if toxemia is great. (T. H. H.)

Malnutrition.—THEODORE J. ELTERICH (*Phila. Med. Journal*, May 23, 1903) says that while all patients present the same clinical symptoms of extreme wasting, yet they can be separated into three distinct groups. Certain cases are due to want of food of sufficient quantity or quality, others to an impairment of the function of assimilation. The third class is that in which the malnutrition is the result of constitutional or local organic disease. Dr. Elterich cites cases illustrating these three classes. In the treatment of these cases he gets the best results in modifying the milk so that it contains a low percentage of fat and proteids. He believes that these infants are able to digest but very little fat and that the giving of cod liver oil is harmful in malnutrition. (R. C. B.)

The Etiology of Endocarditis in Childhood.—SANFORD BLUM (*Archives of Pediatrics*, May, 1903), considers the subject under congenital and acquired defects, which, when once established are certainly a condition predisposing to attacks of endocarditis in childhood. Acute endocarditis originating in early infancy, under three years, is rare, 3,000 autopsies by Holt, Northrup and O'Dwyer furnishing only one case of acute inflammatory lesion. Acquired endocarditis, after the fifth year of age, is not uncommon and in later childhood is of frequent occurrence. Among the causes he gives first rank to rheumatism, which furnishes more cases than all the other causes combined. The severity of articular symptoms is no index to liability of cardiac complication. Endocarditis may be the first and only manifestation of the disease, the result of a micro-organism having a predilection for the serous surfaces attacking the endocardium just as it does the synovial membranes of the joints. Under this head, as closely related to rheumatism, he refers to chorea and tonsillitis. Scarlet fever, measles, diphtheria, pneumonia, all of the acute infectious diseases, may be starting points for endocarditis. Malignant endocarditis is exceptional in infancy. Under this head the author reports a case, two and a half months old, due to the bacillus pyocyaneus. The bacilli were found in the blood ante-mortem, and cultures made after death produced pyocyaneus endocarditis in rabbits. Malignant endocarditis differs only from the majority of simple cases in the gravity of the constitutional symptoms; rheumatism and chorea may be etiologic factors in the causation of both varieties. Experimentally positive results have been obtained by himself and others with the streptococcus, staphylococcus, pneumococcus, tubercle, typhoid, and pyocyaneus bacilli. (T. H. H.)

THERAPEUTICS.

Chas. H. Stoddard, M.D., B. L. Schuster, M.D.

A New Treatment of Unresolved Pneumonia.—SCHUELLER (*Klin. Therap. Wochenschrift*, Jan., 1903) reports a case of what was diagnosed as abscess of the lung apparently cured by a novel mode of treatment. The history of the case was as follows: Following an attack of influenza the patient developed a right-sided pneumonia which did not resolve. Aspiration drew off a large quantity of fetid pus. Two days later the seventh rib was resected; the lung was found firmly hepatized but no sign of an abscess cavity was seen after two months. Schüller injected 120 c.c. of a sterile salt solution into different parts of the lung. In a few days the expectoration became more profuse, the dullness less intense, and vesicular murmur audible. After some time the patient made a complete recovery. The explanation given by Schüller is that the salt solution rendered the exudate more fluid, allowing some of the alveoli to empty themselves so that air could again enter the consolidated area. The movement of the air cells caused a re-establishment of the circulation which led to a removal of the remaining exudate. (C. H. S.)

Chronic Ulcer of Leg.—HANS BAATZ in an interesting monograph (*Sammlung Klinischer Vorttraege*, No. 267) explains his method of treating chronic leg ulcers. It consists in first cleansing leg and foot thoroughly with green soap and warm water. The ulcer and surrounding skin are disinfected with a 0.5-1 per 1000 bichloride solution. With sterile cotton the disinfected area is dried. Iodoform is dusted over the ulcer which is then covered with oil silk extending slightly beyond the margin of the ulcer. Over the eczematous and callous skin about the ulcer Pasta Lassar is applied, (Zinci Oxidati, Amyli, aa p.l, Vaselini, p 2). Over the whole area several layers of sterile gauze and cotton are placed. The author then paints over the leg as well as over successive layer of bandage covering the leg, Unna Zinkleim paste (Zinci Oxidati, Gelatine aa 20.0, Glycerine, Aquæ dest. aa 80.0). The patient is thus enabled to walk about and to attend to his work. This application must be repeated as often as size of ulcer and secretion demand. When the ulcer shows marked granulations salves are applied. He uses ung. hydrargyrum oxydat. rubrum. In later stages this is replaced with boracic acid salve. Exuberant granulations should be checked by the application of the silver nitrate pencil. If on first visit the ulcer shows a marked erithistic character and the surrounding skin erysipelatous or phlegmonous inflammation, the author prescribes rest and moist applications of Liq. Alumin Acetici to which a little ice has been added. The disappearance of this condition usually follows within 3—4 days, and then he treats the ulcer as described. (B. L. S.)

Treatment of Migraine.—KARPLUS (*Klin. Therapeutische Wochenschrift*, p. 142, 1903) makes a sharp diagnosis between true migraine and migraine-like attacks of headache which occur in other diseases. To an incorrect diagnosis of "migraine" must be attributed those cases cured by a

correction of an eye lesion, regulation of diet. The true migraine should be diagnosed by the localization of the pains, the tendency to periodicity, and systemic disturbances (vomiting, lassitude, etc.) and by the fact that pressure over the supraorbital nerve increases the pain. The disease is nearly always hereditary and is closely allied to other nervous disturbances, especially epilepsy, although the occurrence of epilepsy and migraine in the same person is exceedingly rare. In the treatment of migraine a vegetable diet will indirectly benefit the patient by improving the general condition. Alcohol should be especially avoided. It is important to avoid any determining cause of an attack, such as illy ventilated rooms, overstimulation of the nervous system, excitement or overwork, and exposure to a bright light. The best preventive is a course of bromides, 45 grains daily for a long time. If an aura occur in cases where this drug cannot be employed continuously, it may be used immediately before to prevent an attack. The coal-tar antipyretics are recommended. The use of drugs to control the circulation in the brain is entirely experimental because we know but little concerning brain circulation. Adrenalin, diuretin or cocain may be tried. Such treatment should be interrupted during the course of an attack. (C. H. S.)

Acute Infection of Digestive Organs in Nurslings.—PERIER (*Revue Francaise de Med. et Chirurgie*, March 23, 1903) recommends the following treatment: 1. Suspend all milk (breast or bottle) and give a corresponding quantity of pure boiled water, rice or barley water, etc. Milk must only be gradually resorted to as improvement takes place.

2. Every two hours the following mixture in teaspoonful doses for children under 3 months, and in dessertspoonful doses above that age:

Benzo naphthol.....4½ to 7½ grs.
Bismuth salicylate.....7½ to 15 grs.
Syrup of orange flowers.
Gum water.
M. ft. Mistura.

3. If the stools are fetid, infrequent and with tympanites, the following must be given from the onset:

Calomel.....¾ to 1½ grs.
Sugar of milk..... 1½ grs.
M. ft. Pulv.

Erysipelas.—Dr. Stroell finds the following treatment very efficient:

Acid. Carbol.
Tinct. Iodi.....aa. 1.0
Acaciæ..... 5.0
Alcohol absol. ad..... 20.0
M. D. S. Use externally. (Shake label.)

This mixture is brushed over reddened area every 2 hours until swelling and reddening subside. The room is darkened preferably with red curtains to inhibit the growth of the streptococcus. In case of E. faciei he uses a 4 per cent. boracic acid sol. (warm) snuffed into nose every 2 hours because E. of the face usually originates at the nose. Where the E. arises from a wound it should be thoroughly disinfected and properly drained for secretion.

(*Muench. Med. Woch.*, No. 46, 1902.)

SURGERY.

F. E. Waldridge, M.D., H. A. Sifton, M.D., F. Shimonek, M.D.

Clinical Observations in Stomach Surgery.—A. J. OCHSNER (*Journal of the Am. Med. Assoc.*, June 6, 1903) gives his views on surgery of the stomach. He believes that ultimately a large part of stomach surgery will be done for the relief of gastric ulcer or its sequelæ,—hemorrhage, perforation, adhesions, cicatricial contraction with pyloric obstruction and its consequent gastric dilatation, hour-glass stomach and carcinoma. The operation for ulcer if done in the interval between attacks of hemorrhage gives permanent relief and has a very low mortality. The first principle in the operation is to give perfect drainage. Mayo established this principle by making an anastomosis between the lowest portion of the stomach and the jejunum. Pyloroplasty has not been so satisfactory. Simple gastroptosis is probably best relieved by shortening the gastrohepatic and gastrophrenic ligaments. In carcinoma of the pylorus where the tumor is so circumscribed that its removal is practicable, the best method is to close the duodenum and make an anastomosis between the stomach and jejunum.

Complete gastrectomy must remain a rare operation because cases that have advanced so far that it is necessary are usually inoperable.

Ochsner closes his paper by saying, "It is likely that a larger experience will modify many of the opinions expressed in this paper, and it is not intended that it should carry great weight." (F. E. W.)

Appendicitis with Profuse Intestinal Hemorrhage Closely Resembling Typhoid Fever.—C. B. BOX and C. S. WALLACE (*Lancet*, June 6, 1903) report a case of appendicitis complicated by hemorrhage from the bowel. They call attention to the great rarity of this condition and the difficulty in differentiating it from typhoid fever with intestinal hemorrhage Their case is a very interesting one. The signs seemed to point to appendicitis, yet the free hemorrhage, occurring on the sixteenth and succeeding days of the illness, the fever, nocturnal delirium, extreme prostration of the patient caused suspicion of typhoid fever with hemorrhage. A curious feature was the absence of pain and even on pressure there was but slight discomfort. Agglutination test was negative. No rose spots. The spleen could not be felt. The stools were peasoup-like and offensive. The temperature was not above 102.2°. An exploratory incision was made to the surface of the right kidney but no pus was found. The necropsy showed no trace of typhoid ulceration. The vessel from which the hemorrhage came could not be recognized, but the authors do not doubt that it was a branch of the superior mesenteric distributed to the hepatic flexure of the colon and was eroded by a collection of pus making its way into the bowel at this point. They think that the peasoup-like stools consisted of pus from the right kidney pouch and in this way account for the failure to evacuate pus by the exploratory incision. (H. A. S.)

Auto-Epidermic Skin Grafting.—H. F. MCCHESNEY (*Med. Record*, June 13, 1903) describes a new method of skin grafting which would appear de-

cidedly practical. The granulating area is first cleaned with Thiersch's solution and irrigated with normal salt solution. Where the granulations are firm and healthy the graft is placed directly on them. Where the granulations are soft and exuberant they are cut down and gently compressed with dry gauze, until all bleeding is stopped. Then from the thin blue line of epithelial cells along the edge of the wound, small pieces an eighth of an inch square are cut and placed on the granulating surface already prepared. The surface is covered with strips of protective. (F. E. W.)

Some Observations on Movable Kidney.—T. E. GORDON (*Lancet*, June 6, 1903) draws attention to some very interesting points in regard to movable kidney. He first calls attention to the diversity of symptoms caused by this condition and so the often mistaken diagnosis. There may be no symptoms. Those cases which cause symptoms he arranges into groups as follows: (1) those with slight discomfort, a vague general ill health, with or without hysterical manifestations; (2) with gastro-intestinal symptoms; (3) with hepatic symptoms; (4) with renal symptoms. He then cites 7 cases so as to include each of the above groups of symptoms except the renal which he says is very uncommon. From these and many other cases which he has seen he draws the following conclusions: 1. That in neurasthenic cases nephropexy *may* do good. 2. Vomiting and other gastric symptoms can be cured, but if dilatation of the stomach be present a guarded prognosis must be given. 3. Obscure abdominal symptoms may lead to a mistaken diagnosis of movable kidney. 4. The symptoms may exactly simulate gall-stones but both conditions may be present together. 5. Most cases of movable kidney cause no symptoms and so require no operation, but in those which do, excellent results may be anticipated from nephropexy. (H. A. S.)

Wounds from Modern Agricultural Implements.—BASHAM (*Phila. Med. Journal*, June 6, 1903) discusses injuries caused by agricultural machines and implements, such as threshing machines, harvesters, reapers, corn harvesters, corn knives, etc. As these injuries are received some distance from medical centers the general practitioner should be familiar with their treatment. The tendency of these injuries to involve the tendons, nerves and blood vessels calls for treatment that will restore function and result in prompt healing. The injuries caused by the threshing machine are the most serious, the hand usually being torn to shreds. Amputation is usually indicated. Wounds from harvesting machines cause incised wounds which bleed freely and sometimes cause fatal hemorrhage. So long as the blood supply is sufficient there is hope of saving a limb. (F. E. W.)

Cysts and other Neoplasms of the Pancreas.—ROSWELL PARK (*American Medicine*, June 13, 1903) in a very timely paper on cysts and other neoplasms of the pancreas, gathers together the knowledge of this important subject in an admirable and comprehensive manner.

He first calls attention to the various anatomic anomalies that may confuse the surgeon: complete absence of the pancreas, abnormalities of the ducts,

annular and accessory pancreas. The subject is then treated under the following heads: cysts, solid tumors, tuberculosis, syphilis, and pancreatic lithiasis. The varieties of cysts are taken up and described *seriatim* using the following classification: retention, proliferation, hemorrhagic, hydatid, congenital and pseudocysts. Symptomatology and diagnosis are detailed. Operative treatment only is advocated for these cysts, and is considered under 3 heads: aspiration, drainage or marsupialization, and enucleation or extirpation. Park concludes that "the result of most careful study and deliberation is to formulate advice in this brief sentence—that a well-founded suspicion of a palpable pancreatic lesion, of acute or neoplastic character, justifies an early exploration for its discovery and prospective relief, and that when a careful study of the case leaves one in honest doubt regarding its nature then the best rule to follow will be to operate." (F. S.)

PATHOLOGY AND BACTERIOLOGY.

Albert G. Jonner, M.D.

Influenzal Endocarditis.—PROF. FLEXNER (*Univ. of Penna. Med. Bull.*, Vol. XV., No. 11) reports two cases of this disease without a definite history of influenza. Both cases gave a history of repeated attacks of rheumatism and presented the usual symptoms of an acute mycotic endocarditis superimposed on chronic mitral and aortic lesions. In neither of these cases was influenza suspected and the discovery of the nature of the acute process upon the heart valves was only made at autopsy. Coverglass preparations revealed large numbers of small bacilli, which in morphology agreed with the bacillus of influenza. Agar-agar cultures made from heart's blood gave no results owing to the inability of the influenza bacillus to grow on this medium. A second set of cultures from the thrombotic material from the heart valves upon blood-agar slants were badly contaminated. For this reason complete proof of the nature of the micro-organism found cannot be supplied, but the morphology and its manner of occurrence, as well as its refusal to grow upon ordinary culture media, when taken together, would seem to render the nature of the organism all but established. The author refers to three cases collected by Dr. Austin, and under his observation at the Johns Hopkins Hospital, which agree exactly with the description given of the pathological lesions in the present cases. In no instance was a definite history of influenza obtainable. In all cases there had been a history of cough and expectoration. In one of the cases described by Dr. Austin the peculiar bacilli were found in the lung alveoli, as well as upon the heart valves. The importance which the influenza bacillus has acquired of late, on account of its presence as an agent in mixed infections in the exanthemata and some other diseases, lead the author to refer to the recent article of JAEHLE (*Zeitsch. f. Heilkunde*, 1901, xxii., 190); as an agent in mixed infection in diphtheria, to LEINER (*Wiener klin. Wochensch.*, 1901, xiv., 1001); in measles, to SUESSWEIN (*id.* p. 1149).

It is necessary to recognize the influenza bacillus as capable of playing an important rôle in internal infections,—inflammations of pleura, pericardium, endocardium and cerebro-spinal meninges, even brain abscesses. There seems to be no necessary relation between the presence of the organisms and the occurrence of influenza, and it occurs more frequently as a secondary invading organism.

Pneumonia Due to the Gonococcus of Neisser.—BRESSEL (*Wiener klin. Wochensch.*, June 11, 1903) reports a case in a man under treatment for an acute gonorrhea. Fourteen days after the disappearance of the discharge the patient returned with a recurrence. more profuse than when first treated. Five days later, development of headache, fever, and signs of inflammatory infiltration in the lower lobes of the lungs. Sputum, profuse, viscid and blood-stained. Microscopic examination: small groups of diplococci, free and intracellular, Gram negative, and morphologically identical with gonococci. After lysis, lasting four days, some bronchial breathing was still manifest on the eighteenth day.

On the fourth day 8 cm. of blood, taken from the median vein, mixed with agar-agar and plated yielded eleven small gray colonies, absolutely identical, macro- and microscopically with the gonococcus Neisser. Cultivation on blood-agar was also positive. A second similar cultivation from the patient's blood on the seventh day did not yield a single colony. This was due to the infecting micro-organism having become localized by this time, a condition which UNGER has already called attention to in polyarthritis gonorrhoica.

Esophagus Diverticulum.—PROF. HERMANN SCHLESINGER (*Wiener klin. Wochenschr.*, April 30 and May 8, 1903) presents a case in a male *aet.* 69, who gave a history of a fall from a high scaffolding fifteen years ago, with subsequent slight difficulty in swallowing, never becoming marked until recently, when complete impermeability of the esophagus and continual pain became manifest. Vomiting occurred a few seconds to ten minutes after the ingestion of food, and the ejected matter occasionally showed slight traces of blood. Subjectively the location of the obstruction was designated behind the ensiform cartilage. Esophageal sounding demonstrated an obstruction 26 to 28 cm. below the line of the teeth. The introduction of a small stomach tube and lavage yielded large quantities of mucus, masticated and decomposed food rests. Chemical analysis showed an absence of HCl and pepsin in both the vomited contents and those removed by the tube. There was no variation in the circumference of the neck, either after ingestion of food or vomiting.

Differential diagnosis—Spindle-shaped dilatation of the esophagus or diverticulum. The relatively high seat of the condition speaks rather against a dilatation.

Esophagoscopic examination brought forth rather remarkable findings; 23cm. from the line of the teeth a small puckered lumen presented itself, while from the apparently direct continuation of the esophagus food particles were continually oozing. A bougie introduced into the above mentioned lumen passed on into the stomach. The esophagoscope had thus at once found its way into the mouth of the diverticulum, located in the posterior wall, slightly to the right of the median line. Radioscopic examination, after the introduction of a milk and bismuth mixture, showed the diverticulum to be located behind the upper third of the sternum, largely to the right and freely movable with the act of respiration. A soft bougie filled with shot, introduced into the sac, allowed to curve upon itself and again radiographed, showed a distance of 5cm. between the limbs of the U-shape it assumed. The capacity of the diverticulum was fixed at 250cc. Later examinations with the esophagoscope,

after thorough lavage of the diverticulum, showed the existence of erosions in the wall of the sac.

The author now raises the question as to the classification of the demonstrated case and refers to the recently published monograph of von Starck. This writer classifies them into traction and pressure diverticula, and suggests even the possibility of the occurrence of a combination of the two forms. Pressure diverticula may be pharyngeal, pharyngo-esophageal or completely esophageal. Pharyngo-esophageal (*Zenker'sche Pulsionsdivertikel*) he claims as the form occurring with relative frequency and generally as the result of some severe trauma. The completely esophageal forms are extremely rare, and only thirty cases have been found described anatomically and clinically. They are almost always located in the anterior wall, and it has not been demonstrated that trauma can be accepted as the *causa prima* in their development.

In the above mentioned case the condition is an unusual one, as the diverticulum is seated in the posterior wall, is completely esophageal, and the result of severe trauma. It is to be supposed that the primary effect was a rupture of the mucosa, or only a partial tearing of some layer or layers composing the wall of the esophagus, with the production of a condition favorable to the later development of a diverticulum.

Treatment instigated consisted of systematic lavage of the diverticulum and nutrient enemata. The introduction of a permanent tube was not considered warrantable on account of the possibility and added danger of development of pressure necrosis.

Death of the patient occurred as the result of an acute pneumonia, autopsy being as follows: the orifice of the sac was found to be located at the junction of the pharynx and esophagus (Zenker 'sches Pulsionsdivertikel) approximately 2 cm. below the cricoid cartilage, which had a distance of 17 cm. from the line of the teeth. This location does not allow it to be classified as a complete esophageal diverticulum and the author explains the error in having classified it primarily as a complete esophageal diverticulum, in the following manner: he could locate the lower border of the orifice of the diverticulum at a depth of 23 cm. by means of the esophagoscope, but was unable to locate its upper border in the much dilated funnel of the pharynx. The sac being filled at the time of examination, the traction caused by the weight of its contents occasioned a lower seat of the orifice than was demonstrable in the pathological specimen. The sac measured 6 cm. in both its transverse and long axes. The wall showed numerous erosions and was formed of dense connective tissue and scattered bands of muscular fibres. Located at the lower point of the sac was found a turgid varix, of the diameter of a goose-quill. An injury to this, during the daily lavage of the sac, could have led to fatal hemorrhage. Immediately below the cricoid cartilage a small warty excrescence had developed, which on histological examination proved a beginning carcinoma. This is explained as the result of the continual irritation of this esophageal segment during the act of deglutition. The walls of the esophagus were very thin and its lumen decidedly narrow—atrophy due to inactivity. Stomach—atrophic. Striking and unusual were the changes found in the spinal column. The bodies of the 2—5 (inclusive) dorsal vertebræ showed extensive absorption due to pressure; the intervertebral cartilages showed no change whatever. The dorsal spine in this region showed a scoliosis with

the convexity to the left. The absorption of the vertebræ here, is analogous to that occurring with some forms of aneurysm.

The case teaches that the classification of the seat of the diverticulum should be determined by the location of the upper border of its orifice.

DISEASES OF EYE, EAR, NOSE AND THROAT.

C. Zimmermann, M.D., G. E. Seaman, M.D., H. B. Hits, M.D., N. M. Black, M.D., J. S. Barnes, M.D.

Transillumination of the Antrum.—DR. C. ZEIM, Leipzig, (translation by Ant. McCall, M. D., *Journal of Laryng., Rhin., and Otol.*, June, 1903) enters into a free discussion of the subject, citing numerous careful experiments which entirely disprove the claims of those who place great faith in transillumination as a means of diagnosis of suppuration in the antra. He ends his study by saying that he "cannot even claim for it, any reliable diagnostic value, except in distinguishing solid tumors from cysts of the jaw." The article is well worth perusal. (H. B. H.)

Argentum Catarrh of the New Born.— DR. C. W. BISCHOFF (*Centralbl. f. Gyn.*, No. 10, 1903). Although Credé's method is unanimously acknowledged as an excellent prophylatic, its irritating influence has often been emphasized. Cramer, e. g., observed the latter in 96 per cent. of cases. Dr. C. W. Bischoff therefore studied the reaction of Credé's method, carried out strictly according to Credé's directions, on 100 newborn children of the University obstetrical clinic at Bonn. The degree of irritation was measured by the secretion following. No severe reaction occurred in any case. On the first day it was moderate in 20, slight in 21, minimal in 38, none in 20; on the second day slight in 6, minimal in 22, none in 72; on the third day slight in 1, minimal in 10, none in 89; on the fourth day none in 100.

From this Bischoff infers that the severe irritation observed by Cramer must be due to faulty methods. If, however, further experiences with 1 per cent. solutions of nitrate or acetate of silver should prove the latter to be just as effectual as the 2 per cent. solutions, they would be preferable on account of the slighter reaction of the eyes after their use. (C. Z.)

Surgical Relation of the Facial Nerve.—HUGH E. JONES (*Journal of Laryng., Rhin., and Otol.*, June, 1903) after careful study of many temporal bones, lays down the rule that that part of the Fallopian canal in which the facial nerve is embedded is entirely internal to the highest part of the floor of the meatus and below a line running from this upwards and inwards at right angles to the plane of the tympanic ring. We may, therefore, fearlessly chisel away all the posterior osseous wall lying external and superior to this line. (H. B. H.)

Remarks on Injuries of the Eye by Chemicals.— E. SCHWARZ, Aussig, (*Beitr. z. Aug.*, Heft 55) sums up the results, which were rather favorable, in

the treatment of 75 cases of injuries from chemicals. The chief point is the use, as soon as possible, of a chemical antidote and then energetic irrigations with water. When the offending agent is an alkali he uses acetic acid 1 per cent., or diluted hydrochloric or citric acids; when an acid, 2 per cent. solutions of carbonate of soda; when a salt, oleum olivarum. (C. Z.)

Orbital Cellulitis as a Sequel of Scarlatina.—BURTON K. CHANCE (*American Medicine*, June 13, 1903) reports two interesting cases both of which occurred during convalescence. In case 1, a youth, age 17, a diffuse cellulitis suddenly developed in the right orbit. The unusual complication commenced with violent pains in the orbit and neighboring parts, accompanied by a chill, succeeded by a marked elevation of temperature which was soon followed by an effusion of fluid into the areolar tissues with protrusion of the globe. The eye lids were red and excessively edematous; there was great tenderness of the hard and tense orbital tissues. The media remained clear, affording ample opportunity for the study of the interior of the eye. There was at first a blanching of the fundus, followed by intense redness and fine hemorrhages scattered throughout the fundus; also marked swelling of the disc, overdistention of the veins and contraction of the arteries. There was excessive edema of the conjunctiva and lids. A day or two before death the exposed cornea became dry and insensitive; necrosis speedily followed and the eye was lost. Case 2, was a boy of 10, whose right orbit was also affected. The localized symptoms were in general similar to those present in the first case. The cornea remained unaffected; the media clear and no evidence of intraocular exudation at any time apparent, although the disc was swollen and intensely congested, as was the choroid. On the eighth day, without premonitory symptoms, the patient was seized with a general convulsion and died.

Wide and deep incisions were made into the periocular tissues in both cases but only blood tinged serum escaped. Suppuration had not taken place. The course in each case was rapid, death taking place within ten days after the appearance of the special symptoms. No evidence of any affection of the surrounding cavities or contiguous sinuses was discovered. The vision was impaired and later entirely lost by the changes produced by the pressure upon the optic nerve.

In conclusion Chance considers it not unreasonable to advance the hypothesis that there had been so great a massing together of the morbid hemic elements as to produce a phlegmon of the orbit which need not necessarily have undergone degeneration or have given rise to suppuration. In the case of the older boy, it is probable that the local affection had produced a fatal septicemia; while in that of the younger, death may have been due to the sudden passage of an embolus, detached from a heart-clot. Again, death may have followed the formation of a thrombus passing either from the ophthalmic vein to one of the communicating vascular sinuses or in the connections between the cervical veins. (J. S. B.)

Toxic Amblyopia from Coffee.—P. B. WING (*Annals of Ophthalmology*, April, 1903) reports an interesting case of toxic amblyopia from coffee in a

boy 8 years old who had been in the habit of taking six to eight cups of strong black coffee daily. His vision had been failing for six months and at the time the author first saw the case the pupils were dilated and sluggish, the optic disc much congested and the outline could hardly be distinguished; the retinal veins were large and the arteries small. V 20/200 in each eye, visual field contracted.

The coffee was at once stopped, and strychnia, gr. 1/30, t. i. d., prescribed; at the end of one month vision=15/20. Field had increased. The case had practically recovered. (G. E. S.)

HYGIENE AND PUBLIC HEALTH.

U. O. B. Wingate, M.D., W. C. Bennett, M.D.

The Pathology of Summer Diarrheas of Children.—G. W. Boot (*Jour. Amer. Med. Assn.*, June 13, 1903) classifies diarrheas of children as follows:

1. Mucous disease.
2. Diarrheas of indigestion.
3. Diarrheas due to food infection.

A. The result of preformed poisons, e. g., tyrotoxicon, etc.

B. Diarrheas due to bacterial or other infection in which the medium of infection is the food, and in which the poisons causing the diarrhea are elaborated within the body.

a. Tuberculosis of the intestine.
b. Typhoid fever.
c. Amebic dysentery.
d. Cholera.
e. Entero-colitis due to Shiga's bacillus.
f. Miscellaneous infections.

The article deals mainly with the etiology and pathology of summer diarrhea of children and states that while streptococcus infection may be responsible for occasional cases of diarrhea, by far the greater number are due to bacteria of the colon group; from researches made by Celli and Fiocca, Shiga, Flexner, Kruse, Duval and Bassett and others, it appears that Shiga's bacillus, which seems to be identical with the bacterium coli dysentericum is the real offender. This bacillus has been repeatedly isolated from the stools of cases of dysentery, being most plentiful in the fastigium of the disease and diminishing as recovery takes place. It was never found in the stools of healthy infants, and the blood of infants suffering from summer diarrhea agglutinated pure cultures of the bacillus while that from healthy infants did not.

Shiga's bacillus resembles the typhoid bacillus, but no flagellæ have been found.

Shiga inoculated himself with dead cultures of the bacillus, the results of which led him to believe that its toxins were more virulent than those of typhoid and cholera. (W. C. B.)

Sterilized Milk, Pasteurized Milk, or Clean Milk?— C. W. M. Brown (*Archives of Pediatrics*, April, 1903) after referring briefly to the history

of attempts to improve the quality of milk, discusses sterilization—as the term is usually used, which is by heating once to 212° F., and quotes the changes which occur from such heating, as follows: "(a) Decomposition of lecithin and nuclein. (b) Organic phosphorus is diminished in amount and inorganic phosphorus is increased in amount. (c) The greater part of the phosphates are rendered insoluble. (d) Precipitation of the calcium and magnesium salts. (e) The greater part of carbon dioxide is driven off. (f) Normal lactic acid fermentation is prevented, allowing more deleterious fermentations to follow. (g) Lactose is destroyed. (Not below 230° F.) (h) Caramelization of a certain portion of the lactose. (i) The fat emulsion is rendered imperfect or destroyed by coalescence of the fat globules. (j) Separation of the serum albumin begins at 167° F. (k) Casein is rendered less easy of coagulation by rennet. (l) Casein is slowly and imperfectly acted upon by pepsin and pancreatin. (m) Peptone and toxins can be found after prolonged sterilization. Vaughan says that the toxin of the colon bacillus, which is constantly present in great numbers in unclean milk, is not lessened in toxicity by a temperature of 356° F. One two hundred and seventieth of a grain will kill a guinea pig. (n) The taste is rendered objectionable and the cream does not rise well, although this does not lessen its value as an infant food."

The ill effects of using sterilized milk in infant feeding are due to the fact that the soluble calcium salts which are present in normal milk are rendered insoluble by boiling. The point lies in the fact that, unless soluble calcium salts are present, the coagulation of caseinogen will be arrested or delayed. Scurvy is apt to result. In proof of this he states that "of 379 cases of scurvy brought together in the report of the American Pediatric Society in 1898, sterilized milk was the previous diet in 107."

Pasteurization, if done at a temperature between 140° and 160° F., is not open to the above objections, or if so, to only a slight extent, and if maintained at that temperature for 15 to 30 minutes will destroy tubercle bacilli. The author believes that, owing to the skill and apparatus required in pasteurizing milk, whereas sterilization requires little of either among the poor in cities, the latter is to be preferred.

The most important thing about the preparation of milk is to provide fresh, clean, unadulterated milk from healthy animals. This can be and is obtained in many of the largest cities.

Hastings' experiments in regard to the action of fore milk on the decomposition of the entire milk were mentioned, as they seemed to prove that while the fore milk is richer in bacteria than the entire milk, it nevertheless, in some way, prevents coagulation.

Brown maintains that highbred cows, as jerseys, if properly cared for, are not apt to have tuberculosis, and quotes authorities who aver that such care will not cause an increase in price of more than one cent a quart over ordinary milk. (W. C. B.)

A Mask to Prevent Infection with Tuberculosis.—DR. RICHARD ROSEN in his volume entitled *"The Prevention of Diseases,"* says that in tuberculosis the infection may be conveyed by coughing, small droplets of fluid carrying tubercle bacilli being cast into the air, and inspired by healthy persons.

Flügge has recently drawn special attention to this mode of infection, which he considers far more dangerous than that by dried sputum or dust. As a result of Flügge's work, B. Fränkel has introduced a mask which is somewhat similar in form to Schimmelbusch's chloroform mask, is covered with two layers of thick muslin, and fastened around the ears or the head by an elastic band. The mask covers only the mouth and leaves the nose free. The material can be easily removed and replaced by a new piece. It is proposed that this mask should be worn by patients who expectorate much and have advanced phthisis, because apart from the act of expectoration, the small drops of fluid containing tubercle bacilli which are often thrown out in speaking, coughing, and in clearing the throat, would be stopped by the mask. Flügge's and B. Fränkel's experiments seem to show that patients with early phthisis do not convey infection in this way. Nevertheless all phthisical patients should be reminded by the physician to hold the hand before the mouth when coughing, and so far as possible to suppress coughing in the presence of others. A little practice will enable the patient to do this.

(U. O. B. W.)

The Mode of Infection in Tuberculosis and Measures for its Prevention.—F. M. POTTENGER, Ph. M., M. D., (*Journal of Tuberculosis*, April, 1903) arrives at the following conclusions: "There are several ways in which tubercle bacilli may be taken into the system:

1. Through heredity, in which the disease is communicated directly at birth from the mother to the children. (Cornet, Hauser, Knopf.)

2. Through the respiratory system, either by direct inhalation or by the passing of the bacillus through the mucous membrane of the upper air passages.

3. By ingestion; the bacillus being taken into the system with food or with mucous which is swallowed.

4. By absorption through surface wounds.

In the study of the modes of infection, for all practical purposes, we may ignore heredity, for the authentic cases are so few in number that they are of interest only in showing that such a mode of infection is possible.

It would seem that the normal anatomic conditions of the lung would make the direct inhalation of the bacillus into the air cells or the finer bronchi almost impossible. The many turns and curves in the passages, the moisture of the surfaces, the waving action of the cilia, the residual air, together with the penetrability of the mucous membranes, all militate against it; nor does microscopic examination of these organs show particles of dust, soot or other foreign material in the ultimate air passages and air cells. On the other hand, these particles are found in the lymph-spaces and lymph-glands where they have been carried by the lymph-stream or wandering cells.

We are forced to the conclusion that the lymphatics are the chief ports of entry for the bacillus tuberculosis, whether the invasion comes from the upper air passages or intestinal tract.

It would seem from a careful study of the statistics at hand, that in at least a very large proportion of cases of tuberculosis the infectious bacilli were taken into the body through the mucous membranes of the upper respira-

tory and digestive tracts. When once through the mucous membrane, they find themselves in the lymph-spaces, hence they are either carried and deposited in the neighboring or some remote lymph-gland, or find their way through the thoracic duct into the pulmonary circulation to be strained out by the small vessels of the lung.

It is a sad thing to realize that one of our fellow-citizens dies every five minutes of this disease. Owing to the lingering nature, it is necessary for the majority of those afflicted to earn their living while in the active stage of the disease, and while they are throwing out millions of bacilli daily. We find these poor unfortunates everywhere associated with other workmen; so it is necessary to take precautions that they do not infect their fellows.

Every tuberculous individual should know that he has the disease, and should be instructed how to care for the discharges so that his fellows may not become infected. Not only should he be instructed; but if necessary, he should be compelled to do so. Local boards should be empowered to enforce such regulations as are necessary to check this disease.

Laws should be passed and enforced against expectorating in public places.

The owners of factories, stores and offices, where numbers of men are forced to work together in the same room, should be compelled to furnish cuspidors containing some efficient germicide, in which the men should be required to deposit all expectoration.

Rooms occupied by tuberculous patients, who have reached the open stage of the disease, should be thoroughly disinfected before being again occupied. This should apply to hotels, sleeping cars, berths on steamers and work shops, as well as private houses.

Notification is necessary if we ever hope to cope with this scourge. When a case of tuberculosis is discovered, it should be immediately reported to the authorities and some one should be detailed, either the regular attending physician or some member of the health board, to instruct the individual and his attendants as to the precautions necessary in order to prevent the spread of infection. While I recognize that notification is not held in favor, yet it is necessary. Notification is not held in favor in other communicable diseases, but it is enforced in spite of opposition, because it is necessary for the public safety. In the case of tuberculosis it should not be in the form of a quarantine, but simply a coöperation on the part of laity, physicians and health boards, in order to avoid the spread of this preventable scourge. It should be understood that the health board is notified that it may instruct those afflicted and those who must care for them, not that it may punish them by branding them as dangerous. As no quarantine sign will be necessary all the transactions relative to this disease could be and should be carried on in privacy, thus taking away the greatest objection to notification.

The laws regarding buildings cannot be too stringent for the safety of the occupants, for it is shown by statistics that 75 per cent. of all new cases of tuberculosis develop in those who have occupied apartments or who have associated intimately in the living room, work shops and offices, with those who were ill with the disease. (U. O. B. W.)

The Prevention of Measles.—GEORGE NEWMAN (*The Practitioner*, March, 1903) writes that, acting on the recommendation of the Public Health

Committee, the London County Council placed measles on the "Dangerous Infectious Diseases" list.

Compulsory notification and isolation are not required, but sanitary authorities are given power to require cleaning and disinfection of infected premises and articles, as well as compensation for articles destroyed or damaged. Infected rubbish may not be thrown into ash pits; premises known to have harbored infected persons may not let such premises until they have been disinfected, and a penalty is provided for persons making false statements as to infectious diseases in letting houses, or ceasing to occupy infected houses without disinfection or notice to the owner; in general, any act which will expose others to the disease, is prohibited.

Two methods of receiving information of the presence of the disease are cited: 1. By death returns. 2. By school certification. Cases reported by physicians are not numerous, and—as a matter of fact—in Edinburgh, where compulsory notification has been tried, the number of cases has not perceptibly diminished. It was believed, however, that some good was accomplished as it facilitated school closure and school disinfection.

To summarize, Newman says, that for the successful prevention of measles, education, school closure and disinfection are mainly to be relied upon.

Pamphlets relating to the nature of measles, widely distributed, have been effective and proof is at hand to show that school closure and school disinfection are also productive of good results. (W. C. B.)

SELECTED FORMULAE.

Chronic Bronchitis.—M. Martinet reports very satisfactory results in the use of Ergot in conditions of Chronic Bronchitis. He has used the following formula:

Extract Hyoscyami	0.01
Quininæ Sulfat	0.05
Ergotin	0.01

M. f. Pil.
D. tal. Dos. No. 20.
Sig. One to be taken every 2 hours except at night.

(*Presse Médicale*, Dec., 1901.)

Arteriosclerosis.—Lauder Brunton recommends the following for long continued use:

Kalii Bicarbonici	1.8
Kalii Nitrici	1.2
Natrii Nitrosi	0.03

M. D. S. Take this in glass of water every morning.

(*Deutsche Med. Woch.*, No. 16, 1902.)

Physiological Saline Solution.—F. Engelmann, after elaborate experimentation, proves that the 0.9 per cent. salt solution is isotonic with that of the blood. A solution of that strength should therefore be used as physiological salt solution. (*Therapeutische Monatshefte*, March, 1903.)

Contusion of Soft Parts can be appropriately treated—according to Jean Camescasse—with Olive Oil. It suppresses pain and promotes rapid resorption of extravasated blood. (*Revue de Therapeutique*, No. 23, 1902.)

Pityriasis Versicolor.—Aufrecht uses a 4 per cent. sol. Acid. Salicylicum in absolute alcohol. This solution is rubbed into the affected area every night. He reports very satisfactory results after 14 days' treatment.

(*Therapeutische Monatshefte*, March, 1903.)

Dysentery.—Massaier recommends the following:

Salol.
Bismuth sub.
Natrii Bicarb.....aa 0.3
Opii pulv..... 0.015
M. f. Pulv.

In the initial stage the patient is given castor oil and then daily 3 to 4 of the powders. Rest in bed and liquid food exclusively are urged. If the disease has been of several days' duration castor oil is not given.

(*La Sémaine Médicale*, No. 53, 1902.)

Herpes Zoster.—Stroell paints the vesicles every hour with the following mixture:

Menthol 1.0
Alcohol (abs.).....
Aq. Carbolisatæ.....aa 25.0

(*Münch. Med. Woch.*, No. 47, 1902.)

Excoriation of Breast.—

Menthol 1.5
Salol 2.0
Olei Olivar..... 2.0
Lanolini 50.0
D. S. To be applied to affected area twice daily.

(*Bull Gen. de Therap.*, Nov. 30, 1902.)

Vomiting of Pregnancy.—Dr. Gottschalk of University of Berlin recommends:

Menthol 1.0
Spiritus Vini 20.0
Aq. ad..... 50.0
M. D. S. One teaspoonful every hour as often as indicated, or
Cocainæ Hydrochlor..... 0.15
Aq. Destillata..... 120.0
M. D. S. Every ½ hour 1 teaspoonful.

REPORT OF STATE BOARD MEDICAL EXAMINERS.

Following is a report of the examination held at Milwaukee, April 14, 15, 16, 1903:

Name of College.	No. of Applicants.	Passed.
Rush Medical College	1	1
Still College of Osteopathy	3	3
Medical Dept. University of Illinois	1	1
University of Michigan	1	1*
Barnes Medical College, St. Louis	1	1*
Total	7	7

*Reciprocity.

VITAL STATISTICS.

SUMMARY OF STATISTICS OF DEATHS, BIRTHS, CONTAGIOUS DISEASES, ETC., FOR MAY, 1903.

(From the Monthly Report of the Health Department of the City of Milwaukee.)

Number of Deaths.....330
Number of Births reported.....557
Number of Marriages reported....251
Number of Still Births..... 31
Number bodies brought to city for burial 30
Total number burial permits issued 391
Number of deaths investigated by Department 24
Number of deaths reported by Coroner 25
Cases of Small Pox reported..... 39
Cases of Tuberculosis reported.... 3
Cases of Diphtheria reported..... 19
Cases of Scarlet Fever reported... 21
Cases of Typhoid Fever reported.. 8
Cases of Measles reported..... 4
Cases admitted to City Isolation Hospitals 35
Permits for Cremation..... 3

COMPARATIVE MORTALITY

For month of May, 1903, and Deaths from 7 Principal Zymotic Diseases, as taken from Official Reports.

City.	Population.	Deaths.	Annual Death Rate.	Small Pox.	Diphtheria.	Scarlet Fever.	Measles.	Typhoid Fever.	Diarrhoeal Diseases.	Tubercular Diseases.
*New York.....	3,732,903	5,299	18.45	—	192	77	63	88	131	733
Chicago.....	1,885,000	2,675	16.69	7	41	42	62	26	113	264
*Philadelphia....	1,349,712	1,888	17.44	14	38	17	9	110	75	236
Baltimore.....	533,000	753	16.67	—	13	11	5	11	10	113
Cleveland.....	420,000	550	15.45	—	14	—	3	51	25	44
Buffalo.....	380,000	497	15.69	—	6	[illegible]	5	8	21	46
Milwaukee.....	315,000	330	12.36	—	3	[illegible]	—	4	18	37
New Orleans....	310,000	614	23.37	1	2	—	—	8	94	99

W. C. BENNETT, M. D.,
Registrar of Vital Statistics.

* For four weeks, ending May 9th to May 30th, inclusive.

THE WISCONSIN
MEDICAL JOURNAL
AUGUST, 1903

THE ANNUAL ADDRESS OF THE PRESIDENT OF THE STATE MEDICAL SOCIETY OF WISCONSIN.*

BY J. V. R. LYMAN, M.D.,
EAU CLAIRE.

Members of the State Medical Society:

LADIES AND GENTLEMEN: I wish to say as a preamble to this address, that my paper is based upon the presumption that our Society will act in accordance with the report of the Committee on Reorganization (to whom we are greatly indebted for the successful efforts they have made in solving the problem presented to them), and the desire of the American Medical Association as expressed in the newly adopted Constitution and By-Laws. We are about to take an important step, and it seems an opportune time to give a brief history of the earlier years of this Society. You will bear with me if I take you back into the early 40's when we were given birth. In a book entitled "Record Wisconsin Medical Society," there appears on the first page "Law of the State of Wisconsin for organizing Medical Societies, 1849, first enacted A. D. 1841. Sections 1 to 15 inclusive refer to county societies." Thus we see that the incorporators of the Society appreciated the importance of each county having a separate Society, and the laws governing them were given preference over the State Society. It would occupy too much time to read each section. Section 1, after stating how county societies are to be formed, reads as follows:

"And when the said Society shall be so organized as aforesaid, they are hereby declared to be bodies corporate and politic in fact and in name, by the names of the Medical Societies of the County where

*Delivered at the Fifty-seventh Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 3, 1903.

such societies shall respectively be formed, and by those names shall be in law capable of suing and being sued, etc."

Section 3 allows them to purchase and hold any estate, real or personal, for the use of said society, provided said estate does not exceed the sum of $5,000.00, and used exclusively for objects promoting the advancement of medical science.

Section 5 gives the Medical Societies power to examine all students and grant them diplomas.

Section 6. "No person shall be permitted to be examined unless he shall have arrived at the age of 21 years, has at least a good English education, and has studied medicine at least three years."

Section 13 anticipates the need of one or more adjoining counties uniting to form a society when there is not a sufficient number in any one of the counties.

OF THE STATE MEDICAL SOCIETY.

Section 16. "The Medical Society of the territory of Wisconsin is hereby continued under the name of the Medical Society of the State of Wisconsin, and as such shall enjoy all the rights and privileges and possess all the powers heretofore had and exercised by it.

Section 17. Said Association may adopt such Constitution and shall be capable of ordaining and enforcing such By-Laws and Regulations as may be necessary, for the admission and expulsion of its members, election of its officers, and for the proper management of its concerns, provided that said Constitution and By-Laws, Rules and Ordinances, shall not be repugnant to the Constitution of the United States, or the Laws of this State, or contravene the provisions of the Chapter organizing County Medical Societies.

Section 18. Each of the County Medical Societies shall be entitled to elect delegates annually from its own body, not to exceed one for every five of its whole number of members, to represent it in the State Society, who shall be entitled to all the privileges of said body during the time for which they are elected.

Section 19. It shall be lawful for the Medical Society of the State of Wisconsin to grant diplomas under the same restrictions required by the law organizing medical societies.

Section 20. Said Medical Society shall be entitled to elect permanent members of its own body among eminent physicians of this State, not, however, to exceed two in each year, and also elect temporary members out of the State, not exceeding such numbers as may be designated by their By-Laws.

Section 21. All members of the County Medical Societies and all

applicants for diplomas to said Society, who may be expelled or refused diplomas from the same, shall be entitled to the right of appeal to the Medical Society of the State, whose decision in the case shall be final.

Section 22. The property of said Society and also the property of the Medical Society in the different counties of this State, shall be forever exempt from taxation."

This law of 1849 differed but little from the one enacted in 1841.

On page 6 of the Record is written: "The following section being No. 1 in the original of Chapter 2 and corresponding with Section 16 of the foregoing, is the clause or section by which the first meeting of the Medical Society of the territory of Wisconsin was authorized. 'Section 1. And be it further enacted, that Bushnell B. Cary, M. C. Darling, Lucius J. Barber, Oliver E. Strong, Edward McSharry, E. W. Wolcott, J. C. Mills, David Walker, Horace White, Jonas P. Russell, David Ward, Jesse S. Hewett, B. O. Miller and their associates, are hereby authorized to meet at Madison at the Capitol of the Territory of Wisconsin on the second Monday in January, 1842, and form themselves into a society under the name and style of the Medical Society of the Territory of Wisconsin, and when met under such name, shall be a body politic and corporate, and shall have perpetual succession and be capable of contracting and being contracted with, suing and being sued, defending and being defended, pleading and being impleaded in all courts of law or equity, and may have common seal and alter the same at pleasure, and shall be capable of holding estate, real, personal, or mixed. And also to lease, let, sell, or convey the same, provided that the property of said Association shall not, in the whole, exceed Ten Thousand Dollars. Provided also, said estate shall be applied exclusively for the promotion of Medical Science.' Approved February 19, 1841."

The first minutes we find recorded of an annual meeting of the Territorial Medical Society of Wisconsin is on the twelfth day of January, 1847. It was held at the Capitol in Madison, Dr. Mason C. Darling, President. The next meeting was held January, 1848, at Madison. At this meeting it was resolved that the President be requested to deliver an address before the Wisconsin Territorial Medical Society at its next annual meeting. On the 23d day of January, 1849, we have the record of the meeting of the Wisconsin *State* Medical Society. At this meeting it was resolved that the Constitution be and is so amended that the annual meetings of the Society be held on the second Wednesday in June of each year. The Society ad-

journed to meet again on the 13th day of June, 1849, at Janesville, Wisconsin. At the Janesville meeting, a committee of three were appointed to draft constitution and by-laws for the Society. The Society adjourned to meet in Madison on the third Wednesday in January, 1850. This meeting seems to have been one of unusual interest, lasting three days. Dr. James P. Whitney introduced a bill to revise the organic law of the Society, which afterwards was enacted by the Legislature. The records show that for several years the Society held semi-annual meetings, one of these being in January during the time the Legislature was in session. This practice of holding meetings at the time the Legislature is in session is still adhered to in New York, and is claimed to have many advantages, as the physicians are given an opportunity to meet and talk with the law-makers, and in so doing can often defeat measures introduced, which might be a detriment to the profession or a menace to public welfare. No minutes are found regarding the meeting in 1852, which was to be held at Mineral Point. June 15, 1853, the Society met at Janesville. A quorum not being present, they adjourned to meet at Madison the third Wednesday in January, 1854. At an afternoon session of this meeting, on motion, a committee was appointed to revise Section 20 of Chapter 27 of the Revised Statutes of Wisconsin, in such a manner as to allow the Society to admit an unlimited number of members in such manner as it may prescribe in the constitution and by-laws yet to be adopted, with instructions to present the same to the Legislature for its adoption. On motion the Society adjourned until 4 P. M., at which time the Society met, and the Committee on Revision reported that they had discharged the duty assigned to them and that the Legislature had passed a bill so modifying Section 20 of Chapter 27 of the Revised Statutes as to read as follows: "Section 20, said Medical Society shall be entitled to admit permanent members in accordance with its Constitution and By-Laws." This was done with much greater celerity than is possible to legislate at the present time.

From 1854 until 1861 the Society held annual meetings. Then came a lapse until 1867. Its membership increased very rapidly from 1867 until 1881; over three hundred being admitted. A few years ago it was deemed advisable by the American Medical Association to have a revision of the Constitution and By-Laws, as the progress in medicine has brought about so many changes in the last decade. The report of the Committee on Revision was adopted at the St. Paul meeting, 1901, and the committee continued with instructions to draw up a Constitution and By-Laws for State and County Societies, to

conform as nearly as possible to those governing the National Association. The committee reported one year later at the Saratoga meeting, and the report was accepted with the recommendation that the Constitution and By-Laws be adopted by the State and County Society.

ORGANIZATION OF THE MEDICAL PROFESSION.

There is no profession or trade where lack of organization is found as in the medical profession. It has been the study for years of many of our best men to devise some way that this condition could be changed, and to organize the profession in such a manner that it would be an honor and credit to our country. Dr. George H. Simmons, of Chicago, wrote a most able article on organization in the *Journal of the American Medical Association,* and later published it in pamphlet form. Many present have read it, others should do so. It will give you more information and presents the subject more clearly to your mind than is possible for me to do in the time allotted me. In what follows on organization, the writer has taken the privilege of using extracts from this article, as also the arrangement of the different subjects spoken of.

A STATEMENT OF FACTS.

"There are 77,000 physicians in the United States who do not belong to any Medical Society whatsoever. It is a revelation that accounts for the wretched condition that our profession is in as a body politic and as a social factor in many ways. It is jealous, antagonistic, discordant, disorganized, powerless, without unanimity of thought or action on important questions—ethical, social or scientific —without influence socially, politically or in any other way. What is the cause of these conditions? The first rests with those who are not members. These are apathetic, indifferent or ignorant of the practical value of membership in Medical Societies. The second is the want of Medical Societies in many localities so that many of those who desire to become members cannot have the opportunity. The third rests with the Societies themselves. Accepting these propositions as true, the remedy then will be, first, to arouse those not now members from their apathy and indifference and convince them of the value of membership; second, to organize and encourage medical societies in every part of the country; and third, to stimulate existing societies to more active work and, if necesary, to adopt different methods."

OBJECTS OF ORGANIZATION.

"The noblest and most worthy object for which a medical society is organized is the education of its members in that which relates to

their work. There is no other calling in which it is so necessary to constantly study as in that of medicine. Medicine is not an exact, but a progressive science. The knowledge of what is going on in regard to medical progress can be learned in medical journals—but with difficulty. It may be stated that a very, very few do keep in touch with this progress, by reading only. The progressive men belong to medical societies. The meeting together in medical societies makes physicians broad-minded and liberal towards the views of others. It makes the average individual recognize his own shortcomings and the ability of others. The physician who works alone, day after day, without associating with his fellows in like work, will, in spite of himself, become narrow, get into a rut, and his professional horizon will soon extend only to the narrow confine on his own narrowed views in medical life. The tendency of his work is to make him morbid. He is convinced that he is doing his work better than others. Nothing will prevent this deplorable condition so well as an occasional attendance at a society meeting where physicians gather to discuss scientific questions that vitally affect them and their work."

"The second object of organization is to promote a friendly intercourse among physicians. One of the greatest curses of our profession is the existence of petty jealousies, that seem to be so prevalent." If the public would leave their hands off from meddling with the affairs of physicians, the deadly hatred so often found between doctors, in our smaller towns, would not exist. It invariably is caused by remarks of some of the laity whose reputation for veracity might often be questioned. When the different counties are organized and hold monthly or quarterly meetings, physicians here meeting and spending a few hours in getting better acquainted with each other, fraternal feeling will be much stronger. Quoting from Dr. Simmons, "crossing legs under the same table, eating salt from the same saltcellar, and breaking bread together, will banish petty animosities, as the noonday sun banishes the mist of the morning. If the Medical Society had no other value than that of a social club for medical men, it would be worth all it costs."

Other objects, for collective investigation, political influence, enforcement of medical laws, etc., I will have to pass over.

WHAT THE AMERICAN MEDICAL ASSOCIATION ASKS OF THE STATE SOCIETY.

First. That the State Societies unitedly agree to federate themselves in the American Medical Association, and, as a preliminary to this, adopt a uniform organic law in regard to certain fundamental

principles, viz.: to divide their annual sessions into two branches, legislative and scientific. The legislative branch to be as small as is compatible with the representation from all the county societies, and to be composed of delegates elected by the County Society.

Second. That membership in the County or District Society shall constitute membership in the respective State Society without further dues, and that no one be admitted to membership in the State Society except through the County or regular District Society.

Third. That funds to meet the expenses of the State Society be raised by a *per capita* assessment on the County and District Societies.

Fourth. That a united effort be made to influence special societies to limit their membership to those who support the regular organization, and the semi-national and miscellaneous societies to encourage systematic organization, by covering a definite territory and also by limiting their membership to supporters of the regular organization.

Fifth. That each State Society create a permanent committee and a fund for the purpose of enforcing all medical laws in every part of its territory.

Sixth. That each State Society co-operate with the American Medical Association and with the other State Societies in solving the problems now before the profession relating to medical education, medical legislation, reciprocity, licensing, etc.

MEMBERSHIP.

The Society now numbers about 700. In 1881 it had a membership of 381. This gives an average of 18 new members annually for 22 years, and would represent one new member each year from every four counties throughout the State. We have now 2,500 licensed physicians in the State; 2,015 Regulars; 350 Homeopaths; 85 Eclectics, and 50 Osteopaths. The State Society has less than 33 per cent. of the physicians in the State as members. Let us hope that under the new Constitution we may soon have 2,000.

In March last your President wrote to one or more members of the State Society in each County, asking them to organize a County Society, and to send delegates to the State Convention, instructed to ask for charter from the State Society after reorganization. Many of the counties, where there were no societies, have since organized. Other counties, having societies, adopted the Constitution and By-Laws for County Societies as recommended by the American Medical Association. Among those known to have organized under the new Constitution and By-Laws, are Ashland, Brown, Dodge, Douglas,

Eau Claire, Fond du Lac, La Crosse, Milwaukee, Marinette, Manitowoc, Sheboygan, Vernon and Winnebago. There are doubtless others that have organized, from whom I have had no communication.

There have been many inquiries how to proceed, and a general misunderstanding existed as to what was to be accomplished. The report of the Committee on Reorganization, which you heard read this morning, together with the Constitution and By-Laws of the Wisconsin State Medical Association, which each one of you received previous to our meeting, will give you a better idea.

DISTRICT SOCIETIES.

We have in our State several district societies; three of them have informed me that they adopted the Constitution and By-Laws as recommended by the American Medical Association for County Societies and appointed delegates to the State Society. It will scarcely be necessary for me to state that under the proposed plan for reorganization their delegates cannot be received. The Constitution distinctly states that each county must have its own society, and that in order to hold membership in, or become a member of the State Society, a physician must first join the County Society in the county in which he resides.

Provisions have been made for sparsely settled counties, in Chapter 7, Section 4, of the new Constitution and By-Laws. I trust this is clear to you all.

ORGANIZATION OF COUNTY SOCIETIES.

The manner of organizing County Societies can be briefly stated as follows: Send out an invitation to every legally registered physician of your county to meet with you at a certain place and date designated, for the purpose of organizing a County Medical Society. All who attend the first meeting and those who acknowledge their willingness to join by letter, admit as charter members. Pass a resolution stating the object of the society to be for the purpose of affiliating with and becoming a component part of the State Society. Send delegates to the State Society and through them ask for your charter. Adopt the Constitution and By-Laws as recommended by the American Medical Association for County Societies.

ELIGIBILITY.

Article 3 of the Constitution for County Societies reads as follows: "Every legally registered physician residing and practicing in ..... County, who is of good moral and professional standing, and who does not claim to practice sectarian medicine, shall be eligible

to membership." You will thus notice that the old barrier, namely, the word "Regular," which has been such an obstacle to union of the profession, has been removed. Now any physician, who is legally registered, can become a member of the County Society in the county in which he or she resides, regardless of what school of medicine he belongs to, if willing to practice scientific medicine, and so acknowledge his intention by signing the Constitution and By-Laws. These physicians must relinquish the claim of belonging to any special school, or practicing any of the so-called "pathies." When each county has its society, and all reputable physicians are members, there will not arise the contentions, little enmities and petty jealousies as in the past.

REORGANIZATION OF THE STATE SOCIETY.

This is an age of progress, and looking about us we see on every hand commercial interests forming organizations to further their combined or individual profit; while the moral equasion in medical etiquette demands more than this, yet a large proportion of physicians can testify that this idea must be entertained in order to unify medical interests. In union there is strength. Members of the medical profession have none too soon come to realize that without organization it is impossible "to extend medical knowledge and advance medical science, to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians," which Article 2 of the new Constitution assigns as one of the purposes for forming a new association.

NAME OF THE SOCIETY.

It is proposed to change the name of the Society, calling it "Wisconsin State Medical Association." From legal advice obtained, The State Medical Society of Wisconsin is a corporation created by a special act of the State Legislature, and its corporate existence recognized by subsequent enactments.

Section 1430 of the Wisconsin Statutes provides "the State Medical Society of Wisconsin heretofore incorporated and now existing is continued with the general powers of a corporation and such as are conferred by this chapter. If it is considered for any good reason advisable to change the name of the corporation, the change can be made." In view of the fact that its present name is the name mentioned in the State Statutes, it might lead to some confusion were the corporation to change its name, but this might afterwards be met by the Legislature amending the section of the Statutes referred to in respect to the name of the corporation.

Section 1431 provides "Such society may from time to time adopt, alter and enforce such Constitution, By-Laws, and Regulations as may be necessary for the admission and expulsion of its members, the election of its officers, and the proper management of its concern not inconsistent with law."

Section 1434 provides for the appointment of a State Board of Medical Examiners, who may grant diplomas to persons desiring to practice medicine and surgery. This Board is appointed by the Governor from certain lists, one of which is furnished by the Wisconsin State Medical Society. In view of these statutory provisions it is important that the Society preserve its present organization, and that any changes that may be made in it be in the nature of amendments of its Constitution and By-Laws and not the organization of a new corporation. If anything should be done which would amount to the organization of a new corporation, the old corporation would still exist, and would be the only one recognized by the statutory provisions.

HOW TO PROCEED.

Section 1431 of the statutes above quoted authorizes the Society to amend its Constitution and By-Laws. It does not prescribe any method by which such amendment shall be made. The present Constitution prescribes a method of amending the Constitution. Article 15 provides "No amendment shall be made to this Constitution unless such proposed amendment shall have been submitted in writing at some previous regular meeting of the Society, and for such action thirty members shall be necessary for a quorum, and two-thirds of the members present shall vote for the amendment, provided, however, that by a unanimous vote of thirty or more members present at any annual meeting, any article of this Constitution may be amended or repealed, and articles added thereto without such previous notice."

In order to proceed under this article, the proposed amendment should be submitted at a regular meeting, and then passed at some subsequent meeting of the Society. It could not be passed at the same meeting while Article 15 was in force. The proviso in Article 15 that any article might be amended by a unanimous vote of thirty or more members without previous notice, would not authorize the revision and amendment of an entire Constitution. The only way that the entire Constitution could be amended at this meeting, is to first procure an amendment by unanimous vote of Article 15, and when Article 15 has been regularly amended, so as to dispense with the necessity of submitting amendment at a prior meeting, then the other amendment could be made.

The method of amending the By-Laws is somewhat different from that of amending the Constitution. Article 8 of the By-Laws provides, "These By-Laws may be altered, added to, or repealed by a three-fourths vote at any annual meeting."

THE PRACTICAL AND SCIENTIFIC VALUE OF BACTERIOLOGIC EXAMINATIONS OF THE BLOOD DURING LIFE.

BY LUDVIG HEKTOEN, M. D.

(From the Memorial Institute for Infectious Diseases, Chicago.)

The bacteriologic examination of the blood during the life of patients with various diseases has given results of much scientific importance, and in certain cases the method has been found of immediate practical value.

TECHNIC.

The best method to secure blood for bacteriologic cultures is venous puncture under the most scrupulous asepis. Naturally, glass syringes are preferable to metallic because more easily sterilized, and because transparent. The skin must be scrubbed carefully and prepared as customary for surgical operations. By some it is regarded as sufficiently cleansing to wash the area about the puncture with alcohol or ether. In practically all cases one of the veins at the elbow, usually the median, is selected for the puncture, and a moderate constriction of the arm will distend them so that in most persons they are made clearly visible and palpable. In fleshy persons it may be found impossible sometimes to make apparent in this way the location of veins, in which case it may be necessary to make the puncture more or less blindly. The discomfort connected with this little operation is insignificant, and when properly done with sterile needle it is without danger.

Various procedures have been used to secure blood for bacteriologic purposes, e. g., sterile cups (Petruschky), exposure of vein by incision, puncture of the spleen. But real progress followed only the use of venous puncture as described, and the simplicity and certainty of this method recommend it above all others. Ordinary

cutaneous puncture is worthless for bacteriologic purposes because of the small amount of blood obtainable, and especially on account of the frequency of contamination.*

Immediately upon withdrawal of the needle after filling the syringe, suitable media should be inoculated with the blood before clotting takes place. In most cases it will probably be deemed most advantageous to inoculate small quantities of blood, e. g., 1 c.c., into large quantities of some liquid medium like bouillon or milk, e. g., 100 c.c. The main reason for this dilution is the necessity of overcoming so far as possible the natural bactericidal properties of blood, at least for some bacteria, properties that seem to increase as clotting takes place and leucocytes disintegrate.† In order to increase the chances for positive results the number of flasks inoculated may be multiplied to almost any practicable number. Gonococci and other bacteria require special methods.

When we wish to obtain some idea of the number of bacteria in the blood it will be necessary to employ the plate method of making the cultures. This method has been used with excellent results by Schottmüller in the study of typhoid fever. He has found that the mixing of 2 to 3 c.c. of blood with 6 c.c. of agar gives sufficient dilution. In the plates thus made the number of colonies developing may be counted, and the bacterial content of the blood estimated from time to time.

Anaerobic methods may be used when it is deemed advisable, but so far no extensive systematic studies of the blood have been made by such methods. Cole and Gwyn have isolated B. aerogenes capsulatus from the blood during life.

During this process of inoculating flasks, or tubes of solid media, great care must be taken to prevent aerial contamination. The mouth of the uncorked flask should be held in such a way that bacteria cannot fall into the medium. It is to be remembered that one single coccus, for instance, is sufficient to cause contamination of a flask. The most dangerous sources of contamination are the skin of the patient and the air, and in spite of the most careful precautions contaminations will occur from time to time. Undoubtedly organisms are sometimes picked up from the deeper layers of the skin as the needle passes through. In most instances the contaminating organ-

*Older literature on the subject of bacteriologic examination of the blood is reviewed by Kühnau, "Resultate und Leistungsfähigkeit der bakteriologischen Blutuntersuchung im Dienste der klinischen Diagnostik," *Zeitschr. f. Hyg. u. Infektionskr.*, 1897, XXV, 492-548.

†Wright and Windsor, *Jour. of Hyg.*, 1902, ii, 385-413.

isms will be found to be vulgar staphylococci, and in my opinion it will be a safe rule to place no significance upon the development of growths—especially of staphylococci—other than staphylococcus p. aureus—in cultures from the blood, except under very special conditions. From time to time the finding of ordinary staphylococci in blood cultures has led to the misleading announcement that the cause of certain diseases of unknown etiology has been discovered.

The inoculated flasks are then placed in the incubator for 24 to 48 hours, when they are examined for turbidity and other evidences of bacterial growth. When the bouillon remains sterile the blood corpuscles fall to the bottom intact, the supernatant fluid becoming clear or nearly so. In the case of streptococci an early evidence of growth often is diffusion of hemoglobin, i. e., laking of the blood owing to the development of a special hemolytic substance produced by streptococci. This substance has been studied especially by Besredka"* and is called by him "streptocolysin." Ordinary bouillon is sufficiently isotonic with human red corpuscles so that they may remain quite intact in it for days in the absence of bacteria. In case litmus milk has been used as the medium, the growth of pneumococci, for example, may be signalized by redness and coagulation. Typhoid bacilli usually cause a diffuse turbidity of bouillon in 24 to 48 hours. In order to easily secure sufficient material for microscopic examination and for subcultures from flasks of blood cultures, I have found the use of long sterile pipettes very convenient. During these manipulations there is always danger, unless great care is used, of accidental contaminations.

From what has been said concerning the technic of the bacteriologic examination of the blood during life it is evident that its successful practical application requires at least ordinary, careful bacteriologic training and fairly complete laboratory facilities. There is nothing about the method, however, that necessitates any extraordinary skill; the most important part is conscientious regard for fundamental bacteriologic principles so as to escape contamination and erroneous conclusions.

VALUE OF BLOOD CULTURES IN SEPTICEMIA.†

Passing now to a brief consideration of the various diseases in the study of which bacteriologic examination of the blood has been

*Ann. de l'Institut Pasteur, 1902, XV., 880-893.

†NOTE.—No attempt is made to review the literature thoroughly. This field is covered well by Rosenberger (Proc. Phil. Path. Soc., 1903, vi., 157-185, and Am. Jour. Med. Sc., 1903, CXXVI., 234-257).

found to be of scientific and practical value, I shall speak first of the so-called septic conditions of the clinician, which include a number of distinct forms of bacteriemia with or without recognizable metastatic localizations as well as local suppurative processes with toxemia. In this motley group systematic bacteriologic examinations during life offer one of the best means for the establishment of a definite diagnosis upon etiologic basis. The clinical picture and the evolution of these diseases are not sufficiently characteristic for differential diagnosis. This becomes an essential step for the rational use of specific therapy, e. g., antistreptococcus serum.

As pointed out by Marmorek.* the real value of serums of that kind cannot be established unless the diagnosis of the cases in which they are used is controlled carefully by bacteriologic examinations of the blood and of other substances. In connection with these matters the details of the following case may prove interesting.

Mrs. C., 26 years old, under Dr. Herrick's care at the Presbyterian Hospital, was confined the last time Jan. 29, 1903. This was the fifth confinement, and like all the others it was instrumental. Three days later there appeared fever and other symptoms of general infection or toxemia. When admitted on Feb. 8, the uterus reached half way to the umbilicus. There was a pronounced footdrop. Cultures on the 9th gave streptococci; on the 11th remained sterile; on the 14th streptococci were present, also on the 16th. On the 20th the blood count showed 2,835,000 red corpuscles, 12,000 leucocytes, (small monon, 7.5 per cent., large 5 per cent., polymorphon. 87 per cent., eosinoph. 5 per cent.) 55 per cent. hemoglobin. Death on the 24th after continued high fever and muttering delirium. On the 12th she received 10 c.c. antistreptococcus serum and normal salt solution 500 c.c.; on the 13th, 10 c.c. antistreptococcus serum; on the 15th, normal salt solution, 2,000 c.c.; on the 19th, intravenous injection of saline diuretic.

Anatomical diagnosis (Dr. Bassoe): Necrotic and ulcerative endometritis; suppurative arthritis and diastasis of symphysis pubis; acute cystitis; acute splenic swelling; bronchopneumonia and pulmonary edema; laceration of uterine cervix; cyst of right ovary; abscess of left heel; infarct of left kidney.

Bacteriologic examination: Streptococci in the heart's blood, in the pus in the symphysis pubis, and in the spleen.

The clinical peculiarities and variability of the various forms of bacteriemia—streptococcemia, staphylococcemia, pneumococcemia, gonococcemia, etc.—are in reality but poorly understood.† The re-

*Ann. de l'Institut Pasteur, 1896, X, 591 and 620.

†See Kretz, Verh. deut. path. Gesellschaft, 1901, IV, 186-187, and Zeitschr. f. Heilkunde, 1902, XXII.

sults of systematic examinations during life will complement the observations made upon material secured after death which naturally gives us information principally of what takes place at the end of life. No doubt the conditions during life are often different from those indicated by postmortem findings, which may be obscured by agonal invasions and by the unrestrained multiplication of bacteria in the blood and organs after death. Systematic examinations by Lenhartz*, Bertelsmann† and others show that in the majority of the so-called septicemias it concerns streptococcemia. Canon‡ endeavors to establish the indications for amputation in progressive phlegmons of the extremities by the number of colonies in the plate cultures of the blood made at frequent intervals, an increasing number establishing the necessity for amputation. While the number and character of the observations hardly warrant definite opinions upon such points as this, it has been shown clearly by blood examinations that recoveries frequently take place in various forms of bacteriemia. Indeed, one of the conclusions of the very first systematic examination of the blood in septic diseases, namely by Petruschky§ in 1894, was that in cases of acute infections with pyogenic cocci the infecting organisms may be present in the blood to some extent even in cases that do not terminate fatally, so that the finding of pyogenic cocci in the blood is not of itself sufficient reason for a hopeless prognosis. More recently Bertelsmann in a much larger series of cases of bacteriemia reports 21 recoveries in 47 cases, of which 28 were cases of streptococcemia with 15 recoveries. E. Libman recently reported 23 cases in which he found staphylococcus aureus in the blood during life‖, a finding confirmed in every instance by the recovery of the same organism from metastatic localizations. Five of Libman's 23 cases recovered.

In the Memorial Institute for Infectious Diseases bacteriologic examinations of the blood in scarlet fever have revealed streptococci in a number of cases that recovered.¶ Many of these instances of streptococcemia in scarlet fever presented mild clinical symptoms, but recovery has taken place also after prolonged and severe illness. Observations of this kind show the necessity for great caution in interpreting the results, sometimes apparently marvelous, of anti-streptococcus serum and other more or less rational forms of treatment of

*Von Leyden's Festschrift, 1902, p. 325.

†Verh. d. Gesellsch. f. Chirurgie, 1902, XXXI, 291-304.

‡Mittheilungen a. d. Grenzgebiete, etc., 1902, X, 411.

§Zeitschr. f. Hyg. u. Infektionskr., 1894, XVII, pp. 59-117.

‖Medical News, 1903, April 19, 733-736.

¶Hektoen, Jour. American Med. Assoc., 1903, Feb. 17.

blood-poisoning. Certainly it would be erroneous to regard every severe case of "blood-poisoning" as of necessity doomed to death, or in the language of over-enthusiastic reporters of novel forms of treatment, as "otherwise surely fatal." The relative dangers of the different forms of bacteriemia may be determined more definitely than now known by the continued bacteriologic studies of the blood in these diseases.

PNEUMONIA AND PNEUMOCOCCEMIA.

At one time the impression prevailed that in lobar pneumonia pneumococci occur in the blood especially in fatal cases, and that for this reason the practical value of blood cultures in pneumonia would be more marked from the standpoint of prognosis rather than of diagnosis. But further observations seem to indicate that pneumococci occur in the blood in all or nearly all cases of lobar pneumonia. Proschaska* concludes that pneumococcemia in pneumonia does not necessarily mean an especially severe infection, and this conclusion seems to be borne out by the work that Dr. Rosenow is now carrying out in our laboratory.

The peculiar sensitiveness of this organism makes it difficult to obtain good growths in our ordinary media unless special care is taken, and no doubt the discrepancies in the results of the various investigators are explainable in large degree upon this score. Contrary to the case of the typhoid bacillus, human serum has no bactericidal effect upon pneumococci so far as demonstrable by the usual plate method (Behring). Indeed, Dr. Rosenow finds that the presence of blood in the medium appears to distinctly favor the growth of pneumococci, a fact that probably has not been taken advantage of sufficiently in many of the previous investigations upon pneumococcemia in pneumonia.

The following case is given as an example of rapidly fatal pneumococcemia without any distinct localization so far as could be determined by clinical examination†:

Mr. H., age 47, in previous good health; for two weeks he had watched over his two children who were very ill with pneumonia; he noticed that his nasal catarrh, which was of long standing, had grown worse rapidly, and within a few days severe frontal headache developed; slight fever came on and gradually increased while the headache became almost unbearable. Dr. Herrick saw him on about the seventh day. There was then slight delirium with tendency to drowsiness;

*Deut. Arch. f. klin. Med., 1901, I, XX, 559

†For the clinical history, I am indebted to Dr. Herrick, who saw the case in consultation.

no retraction of neck; pulse 90; lungs normal; no vomiting; retina normal; no paralysis or twitchings; Kernig's sign not present; meningitis suspected secondary to pneumococcus rhinitis; typhoid fever also considered though there were no rose spots, no splenic enlargement, and no agglutination reaction. On the next day cultures of the blood were made, pneumococci developing in pure culture. The blood showed leucocytosis. At this time the patient was quite clear mentally, but he soon became unconscious and died within 18 hours. No necropsy.

TYPHOID AND PARATYPHOID FEVERS.

Systematic bacteriologic examination of the blood in typhoid fever has resulted in important additions to our knowledge of this disease.

Diagnostic Value of Blood Cultures in Typhoid and Paratyphoid Fevers: In the first place we are learning that typhoid bacilli occur in the blood so early—while the temperature is rising—and so regularly, that bacteriologic examination of the blood may be regarded as the best means of diagnosis in the early stages of the fever, the period when definite diagnosis is most difficult yet most desirable. Schottmüller* and others have cultivated the bacilli from the blood as early as the first and second days of the fever and long before the appearance of specific agglutinins, and also in the first 24 hours of relapses after distinct intermissions.† In case 30 of Dr. Ruediger's bacteriologic study of the blood in typhoid fever‡, which was carried out in our laboratory, a positive culture was secured on the third day of the attack (the patient was a physician working in the laboratory) while the first positive agglutination test was obtained 14 days later. In Courmont's§ series of 37 cases, in every one of which he found bacilli in the blood, bacilli were demonstrated in six cases long before the agglutination test was positive.

Busquet‖ also emphasizes the diagnostic value of blood cultures in typhoid fever. In his series of 43 cases the typhoid bacillus was present in every one.

As further evidence of the diagnostic value of bacteriologic examination of the blood I may mention here also three cases supposedly of scarlet fever, blood cultures of which showed the presence

*Münch. med. Wochenschr., 1902, XLIX, 1561-1565.

†Polacco and Gemelli (Centralbl. f. innere Med., 1902, XXIII, 121.) secured pure cultures of typhoid bacilli from rose spots, often before agglutination.

‡Trans. Chicago Pathological Society, 1903, V, 187-198.

§Journ. de Phys. et Path. gén., 1903, V, 331-340.

‖Presse Médicale, 1902, p. 593.

of typhoid bacilli at a time when the clinical symptoms did not point clearly to typhoid fever. In one of these cases it probably concerned an association of typhoid fever and scarlet fever; in the other two it is quite likely that erythema and angina in the beginning of enteric fever led to the diagnosis of scarlatina.

Hence the clinical examination of doubtful cases is not to be considered complete or exhaustive without cultures from the blood. Bacteriologic examination of the blood is indicated especially in epidemics of fever, more or less like typhoid fever, but concerning the nature of which there may be for a longer or shorter time more or less doubt for various reasons. In such instances positive diagnosis is most valuable; it clears the situation and leads to the prompt adoption of aggressive measures for preventing the further spread of the disease. In the recent typhoid epidemic at Ithaca, more or less doubt and confusion as to the nature of the fever seems to have led to an unfortunate hesitation in seeking and destroying the source of the infection. The American community is often—much too often—disastrously slow in submitting its sanitary welfare to expert guidance.

What I have said of the diagnostic value of blood cultures in typhoid fever is also applicable to paratyphoid fever.

Is typhoid fever a bacillemia? In the second place the results of the recent bacteriologic studies of the blood in typhoid is changing our conceptions of the nature of the disease. In their summary of the literature Kerr and Harris* show that bacilli are demonstrable easily in the blood of from 80-90 per cent. of unselected cases. The earlier the cultures are made the more certainly are bacilli found. On the other hand, the present indications are that the bacilli begin to disappear from the blood shortly before the temperature begins to fall (Schottmüller, Ruediger), but relapses and even ephemeral recrudescences are associated with a reappearance of the bacillemia (Schottmüller). Schottmüller, who has paid special attention to these questions and who bases his deductions upon observations of more than 100 cases, believes that the number of bacteria in the blood, as determined by plate cultures, stands in direct relationship to the height of the fever and general severity of the attack. He consequently ascribes prognostic as well as diagnostic value to the results of blood cultures.

While the older views in regard to the nature of typhoid fever generally place the stress upon the localization of the bacilli in the lymphatic structures of the intestines and absorption of toxic sub-

*Chicago Medical Recorder, 1902, xxiii, 232-239.

stances therefrom—only small numbers of bacilli passing into the blood—it now looks as if bacillemia or blood infection is a dominant feature in the pathogenesis of the disease.*

It seems to me that the early occurrence of bacillemia, its persistence during the height of the attack, and its relation to relapse and recrudescence indicate that the bacillemia has far greater significance than merely that of transportation of bacilli between primary and secondary foci of localization. Indeed, Schottmüller is inclined to regard the intestinal lesions of typhoid as secondary from hematogenous invasion at the same time as he believes that the bacilli enter the blood by way of the intestinal tract, which we must assume is devoid of protective substances at least at certain periods of life. Thus, W. Meyer observed typhoid bacilli in enlarged Peyer's patches and solitary follicles on the second day of the disease but with as yet no swelling of the mesenteric glands. But we also know that typhoid fever may occur without recognizable intestinal lesions, or only very limited such; and certainly the extent of the intestinal lesions is not proportional to the severity of the attack. I remember well the necropsy of a case in which death was due to peritonitis following rupture of a single ulcer in the ileum, there being no other intestinal lesions. Then again I may refer to the fact that the closely related paratyphoid fever appears to cause no intestinal lesions, judging from the only two autopsies so far recorded (Longcope, Sion and Negel). But this question of the exact genesis of the typhoidal intestinal lesions, whether all the result of primary invasion from the lumen of the bowel or in part or wholly of secondary localization from the blood, requires further study before we can reach final conclusions. Perhaps invasion of the intestinal wall takes place along both these routes. The occasional occurrence of angina in the beginning of typhoid suggests that perhaps the tonsils may also be points of entrance of the bacilli into the blood. Certainly the demonstration that bacillemia is so prominent in enteric fever lends little support to the specific value of intestinal treatment of this disease.

In the lymphatic, splenic and other lesions of typhoid the most prominent microscopic feature is the large number of phagocytic endothelial cells containing red cells and lymphocytes. Recent experimental work shows that hemolytic substances in general induce the formation of macrophages, and it may be that the B. typhosus when in the blood produces substances of this kind in large quantities as the

*Wright and Semple (Lancet, 1895, II, 196-199) concluded that typhoid fever was not an "intoxication-process," but the result of blood infection because typhoid bacilli are found so frequently in the urine in this disease.

result of the reactions between its receptors and atom complexes from the patient. Probably various toxic substances are also set free as bacilli are destroyed by the bactericidal actions of the blood. Interesting questions of this kind, as well as the important problem of the manner in which the normal bactericidal properties are set at naught when typhoid bacillemia is established, await solution by means of modern cytotoxic and bacteriolytic methods of investigation.

Paratyphoid: In the third place it has been demonstrated that the general clinical picture of typhoid fever may be produced by bacilli other than the typical typhoid bacillus, namely by the so-called paratyphoid or paracolon bacillus, and that the typhoid fever of the past includes a number of similar, closely related, yet etiologically different diseases.* In these cases of paratyphoid, as they have been called, the special bacilli seem to occur in the blood just as does the typical bacillus in typical typhoid. As the matter now stands, paratyphoid seems to develop under the same general conditions as typhoid fever. Systematic bacteriologic examinations of the blood in epidemics of typhoid fever appear sooner or later to reveal cases of paratyphoid, and the number of instances recognized and studied have multiplied with increasing rapidity since Gwyn's case in 1898. As yet the number of cases of paratyphoid appears small indeed as compared with typhoid fever proper, and it is too early to form any idea as to the real frequency of paratyphoid. In Ruediger's 30 cases of clinical typhoid from the services of Dr. Billings, Dr. Herrick, and Dr. Robison in the Presbyterian Hospital of Chicago, two, possibly three proved to be paratyphoid. It is of great interest to note that recently small epidemics of paratyphoid have been recognized and studied in Germany, and a beginning has been made in the study of its clinical peculiarities. In the epidemic of 38 cases studied by Conradi, Drigalski and Jürgens,† the beginning of the disease was often abrupt and the termination sudden without high or prolonged fever. The clinical symptoms, otherwise like those of typhoid, were on the whole not severe, and all the cases recovered. Schottmüller's cases and Feyfer and Kaysers‡ 14 cases were also marked by the mildness of the clinical course. Before long the clinical characteristics of paratyphoid no doubt will be established even more definitely. In a fatal

*For a general consideration of paratyphoid see Meltzer, New York Med. Journ., 1902, 138-142.

†Zeitschr. f. Hyg. u. Infektionskr., 1903, XLII, 141, 147. See also Hünermann, *Ibid.*, 1902, XL, 522-528.

‡Münch. med. Wochenschr., 1902, 41-42.

case of paratyphoid studied by Longcope* there were no lesions in the intestines and no splenic or lymphatic endothelial proliferations, showing that the lesions in that case differed from those of typical typhoid. Sion and Negel† also describe a fatal case of paratyphoid without typhoidal lesions. These authors also report a small series of paratyphoid fever and trace the source of infection to water. Just now the lesions of paratyphoid are matters of special interest to pathologists.‡

In her valuable study of the fly as the carrier of typhoid bacilli in some of the Chicago tenement districts, in which typhoid fever last year prevailed to a greater extent than elsewhere in the city, owing principally no doubt to shockingly inadequate methods of disposing of dejecta and neglect in sanitary inspection, Alice Hamilton§ shows that the fly may convey paratyphoid or paracolon as well as typical typhoid bacilli. This demonstration permits the inference that under favorable conditions paratyphoid may be spread by flies just as well as typhoid fever, and that these infections are amenable to the same hygienic and sanitary measures.

No doubt the absence of agglutinins for typhoid bacilli in certain cases clinically like typhoid fever is explainable in some cases on the score of the disease being paratyphoid. The interagglutinability of typhoid and paratyphoid or paracolon bacilli presents an interesting field for exhaustive study.‖ While the serum failed to agglutinate typhoid bacilli in Ruediger's cases of paratyphoid, others have found that some agglutination of typhoid bacilli may be caused by paratyphoid serum. It has been already pointed out that in some cases of true typhoid, agglutinins are recognizable only after the attack is well established. Under these circumstances it is clear that much weight cannot be placed upon the absence of agglutination in determining the nature of a given case or cases of doubtful character. In the Ithaca epidemic this point seems to have been overlooked. The bearing of this whole matter upon the epidemiology of the typhoidal infections is stated so clearly by the special commissioner of the Journal of the American Medical Association that I quote directly from his report.¶

*Am. Jour. Med. Sc., 1902, CXXIV, 209-218. See also articles by Buxton and Coleman, Johnston and Hewett in same number.

†Centralbl. f. Bakt., 1902, XXXII, 483-488, 581-596, 679-692.

‡An interesting report on this subject is given by Lucksch, from Chiari's Institute (Centralbl. f. Bact., 1903, XXXIV, 113-117).

§Jour. Americ. Medic. Assoc., 1903, XL, 576-583.

‖See Castellani, Zeitschr. f. Hyg. u. Infektionskr., 1902, XL, 33-53.

¶Jour. Am. Med. Assoc., 1903, XL, p. 783.

"Throughout the epidemic the situation has been singularly befogged by a tendency on the part of certain of the Ithaca physicians to deny the prevalence of 'genuine' typhoid fever, and to ascribe the prevailing illness to 'paracolon infection.' The evidence on which this view is based, appears to be that a negative result with the Widal reaction has been obtained in a considerable proportion of the cases that have been tested. There is no instance where any paracolon or paratyphoid organism has been isolated from any case of the disease. Even if it were conclusively proven that half, or even all, of the cases of 'fever' in Ithaca were true 'paracolon' infections, it is difficult to see why that fact should materially influence the general situation. It must still have been admitted that a disease of serious character which can not as yet be clinically differentiated from typhoid fever, and which, so far as is known, does not demand essentially different treatment, prevailed excessively in the town. Whatever the nature of the organism, the probable mode of infection and the sources of the infection remained the same, as did the necessity for taking vigorous measures for preventing its spread. There was not a single particular in which the practical handling of the outbreak could have been affected, even if convincing evidence had been secured that all the cases in Ithaca were paracolon cases. The insistence on a distinction, which, under the circumstances, could possess only an academic value and did not facilitate immediate and aggressive action, was not a fortunate policy."

The superior diagnostic and practical value of bacteriologic examination of the blood is emphasized again by this reference to the question of the typically typhoidal or paratyphoidal nature of a given epidemic, and we may conclude this brief consideration with the statement that the method of blood cultures is destined to play a most important part in the settlement of the many practical and scientific problems constantly arising in connection with the typhoidal diseases, which, though so well-trodden a field, still invites continued exploration.

CONCLUSIONS.

1. Bacteriologic examination of the blood by modern methods has proven of great scientific and practical value in the so-called septic diseases or septicemias, in pneumoia, and especially in typhoid and paratyphoid fevers.

2. In the typhoidal diseases blood cultures constitute the best means of diagnosis in the early stages, and that is the period when definite diagnosis is most difficult yet most desirable.

3. Etiologic diagnosis, that is, the recognition of the exact disease present, demands the application to practical medicine of laboratory methods, and henceforth the physician's work will require more and more the constant and intelligent use of the facilities of a well-equipped laboratory.

Discussion.

DR. JAMES B. HERRICK, Chicago—I wish in the first place to thank the Society for the courtesy of the invitation to discuss this paper of Dr. Hektoen's, and to meet the members of the Wisconsin Society.

I wish to speak briefly of four or five points, some of which are merely repetitions, emphasizing the points made by Dr. Hektoen.

First, the bacteriologic examination of the blood is of great importance to us as clinical physicians, because sooner or later, and we trust sooner, there will be specific therapy for the infectious diseases, and as physicians we must be ready to apply the specific medication that is presented to us. If to-morrow morning, for instance, we should wake up and read in some reputable medical journal that a specific medicine had been discovered for pneumococcus infections, or for streptococcus or staphylococcus infections, how many of us would be prepared intelligently to use this remedy? How many of us as we meet with our cases of so-called septicemia or "blood poisoning," would be able to tell by the clinical manifestations what was the infectious agent that was at fault? How many of us would be prepared to apply this bacteriologic method of diagnosis? So then, the first point that I would make—and I shall not elaborate these points, merely speaking of them in a suggestive manner—would be, that as practical physicians we must be ready to accept this specific therapy which we believe and trust will soon be offered to us.

In the second place we must practice the bacteriologic examinations of the blood carefully and thoroughly in order that we may understand better the clinical course of these diseases. What I mean is this: We see cases and group them together very roughly as cases of blood-poisoning or septicemia. We cannot on clinical grounds, at present differentiate accurately between a case of pneumococcus septicemia, staphylococcus septicemia, or streptococcus septicemia. It is possible that if we study these cases carefully from the ordinary clinical standpoint, accurately regarding and recording symptoms, studying them in groups and controlling this work by careful bacteriologic examinations of the blood, we shall ultimately be able to have definite clinical pictures of these different forms of bacteriemia. In the early part of this century typhus and typhoid fever were confused. There was no clear clinical differentiation between those two different diseases, and yet the differentiation was made by a combination of the results of post-mortem examinations and clinical study. In a somewhat similar way we can, I believe, by careful study of our cases by bacteriologic examination of the blood, have definite clinical pictures, one representing a pneumococcus septicemia, another a streptococcus, another a staphylococcus septicemia, etc. Perhaps also it will be possible for us as clinicians to state in the future that one case is probably a paratyphoid infection, and another is probably a case of true typhoid infection. This will enable us also to make a more accurate prognosis, because we shall learn the definite clinical course of all these infections. We shall know what to expect in a given case. We shall know what complications we are likely to meet with in infection with one organism and what in infection with another. We shall therefore be the better able, even before the days of specific therapy, to apply our symptomatic remedies.

In the third place (and this I do not need to dwell upon because it

has been brought out so well by Dr. Hektoen) we are enabled by bacteriologic examination of the blood, to make early accurate and definite etiologic diagnoses—really the only true diagnoses. This has been shown repeatedly in cases that have been under my observation, particularly in the cases of typhoid fever where diagnosis as early as the third or fourth day has been possible by this method, long before rose spots appeared or indications were obtainable from the spleen, or agglutination reaction was found.

In the fourth place this method of bacteriologic examination of the blood is not only practical but it is practicable—it is feasible. I hope that Dr. Hektoen will give some of you the opportunity to see the little, simple technic employed. It is really just as simple, with the exception of the necessity of a little more scrupulous asepsis, as the giving of a hypodermic injection; it is attended by no more pain than a vaccination, in fact not so much. Now, this is feasible certainly in our hospitals where we have laboratory facilities close at hand. It certainly is feasible in our large cities, where with medical colleges and laboratories we can easily call in to our aid the laboratory expert. But the question comes up, how much of this can be done in the smaller towns, how far can the country practitioner adopt this method of diagnosis? That is a difficult question to answer, and we have to say as things are now, it can only be adopted in the larger towns; or it can be adopted in the smaller country towns where some exceptional man keeps up at his own expense, his own private laboratory. But this bacteriologic examination of the blood has come to stay; it will have to be adopted if the profession is to keep pace with the advance in science, and it seems to me that in the smaller country towns something like this might be adopted: Where there are ten or a dozen physicians in a group in one town, or in several neighboring towns, I can see no reason why one of them, perhaps one of the younger men starting out in practice fresh from the laboratory, should not institute a little laboratory of his own. The expense is not great, and if the laboratory could be started with the backing of the other physicians, with the understanding that other physicians could apply to this one for the bacteriologic examination of the blood in a given case, the one to be paid in any way that can be mutually arranged, I do not see why such a plan as that is not perfectly feasible, and certainly, if it were adopted, the profession in the smaller towns would have the feeling that they were keeping up with the procession.

And in such a laboratory, of course, not only the bacteriologic examination of the blood would be made but as well the examination of urine, sputum, stomach contents, feces, tumors, exudates, etc.

It is possible, too, that these laboratories in towns or counties might in some way be under the supervision of the county medical societies.

There is another point that I would make in conclusion, and that is this: In spite of the fact that the general practitioner has to rely upon the laboratory in many instances for his diagnosis, we must remember that all laboratory work is, after all, to be controlled and to be interpreted by clinical observation. It is not enough for us to be told by the laboratory expert that there are typhoid germs in the blood, or pneumococci. It is not enough for us to be told by the laboratory expert that there are tubercle bacilli in the sputum. That means something to us—it clinches the diagnosis, if you please; but what, after all, do tubercle bacilli in the sputum mean, if that

finding is not interpreted and controlled by the ordinary physical examination? In one case it means a little patch of infiltration at the apex of the lung, with practically no disturbance of the patient, with no fever and loss of weight; in another it means that the patient is in the terminal stage of pulmonary tuberculosis. We must control and interpret these findings of the laboratory by our clinical experience. The day of the feeling of the pulse, looking at the tongue, taking the temperature and listening to the sounds of the heart, has not passed, by any means. And if we jump to the conclusion that we must rely wholly and exclusively on the laboratory findings, we shall, I think, all of us make a serious blunder. How many of us have not at times had to make diagnoses in spite of the findings of the laboratory? You send a smear from the throat to the laboratory and get a report "No diphtheria germs," but your clinical experience tells you that that is diphtheria—you know it—and at times you have to make your interpretation in spite of the negative findings of the laboratory. I am sure the day of the general practitioner is not passing away because of the laboratories. The true way in which to look at this laboratory work is that it is an aid to practice. The laboratory man and the general practitioner should go hand in hand. I regard this paper of Dr. Hektoen's as a very timely one, and I regard it as significant of good and great things that a laboratory man comes from his purely scientific work and presents to us a paper that shows us the practical side of scientific laboratory investigation.

DR. O. THIENHAUS, Milwaukee—This is a very interesting paper and I would not like to let it go by without making a few remarks. When we have to deal with a severe septic infection on an arm or leg which does not yield to incision and drainage but even spreads in spite of large incisions; when at the same time the general condition of the patient is very grave, then the question arises, are we justified and are there indications to amputate the limb, and is this the only means of saving the patient's life? It is very difficult to give strict indications for amputation in such cases, and one has relied recently on blood examinations and has found, that when daily made blood cultures show that the amount of streptococci in the blood increases daily, this is a strong argument for amputation.

Take another condition: When a puerperal uterus is infected and the general and local symptoms of sepsis are very severe, the question arises, is there here an indication for vaginal or abdominal hysterectomy to save the life of the patient? One has made blood examinations in these cases and has hoped to find arguments in this for or against operation, but the results up to this time are very far from being conclusive. Bacteriologic examinations of the blood may show the presence of streptococci in large numbers and yet the patient gets well without hysterectomy. In other cases you find hardly any streptococci in the blood, and nevertheless the patient dies promptly.

Therefore we have hardly any help from the blood examinations up to this time, to form definite conclusions.

At the last meeting of the American Medical Association a surgeon told me that he had done five vaginal hysterectomies because of puerperal septicemia, and all of his patients got well; but I told him that this was a sure sign that the operations should not have been performed, as the patients would probably have gotten well without hysterectomy.

DR. FRED R. WEBER, Milwaukee—The development of bacteriology along certain chemical lines during the past decade almost precluded further progress. Very early the toxins of diphtheria and tetanus had been discovered, and the antitoxins had been produced in the laboratory. In these two diseases, the microorganisms have certain group characteristics—the point of invasion being localized, while the character of the infection is a typical toxinemia, a *distant chemical* reaction of special tissues.

Accurate study of the characteristics of other groups of bacilli soon showed that we had to return to the bacillus itself if further progress was to be made possible.

We cannot thank investigators like Dr. Hektoen too much for the new breath of life they have given to this branch of science.

One of the characteristics of the typhoid bacillus is that it is rapidly destroyed by the bactericidal properties of the serum, when blood is withdrawn from the body. We must immediately dilute the blood, if our cultures are to be positive. Every moment lost in preparation interferes with the result. Typhoid infections may thus be recognized long before localization at the point of predilection—Peyer's placques—has taken place. We may look upon the typhoid infection as a bacillemia with its localization in the intestines, in the spleen, etc., and metastases in the skin (rose spots), and in early stages in the kidneys. In this organ the typhoid bacilli are found enclosed in reactionary tissues, and the presence of a trace of albumen in the urine is very often the result of the bursting of these metastatic deposits. The bacilli multiply rapidly in the urine, and thus form a new and very dangerous source of infection. This conception has led to the use of urotropin—one of the greatest blessings of the decade.

The study of the bacillemia of typhoid, and of the bactericidal properties of serum, as well as of the agglutinins, has also shown us that Widal's tests must be unreliable. The agglutinins represent a reaction of the body tissues that is to be regarded as protective, yes, as therapeutic in the wide sense of the word, hence Widal's test is a therapeutic test, showing that the infected being is producing within itself one of the factors concerned in preventing further rapid invasion of the system. If agglutination is absent, the body has not reacted favorably for itself up to the time.

Micrococci have the characteristic of multiplying rapidly in the serum, hence a blood culture of a case of septicopyemia should be allowed to remain in a sterile vessel for at least half an hour before the typical cultures are made.

Accurate bacteriological study of the blood is overturning many of our old conceptions of infectious diseases, and certainly will lead to other forms of healing-agents than the antitoxins, which have hindered progress—as it were.

DR. HEKTOEN—This is, of course, a very large topic in one way because it touches very many different diseases. With reference to the point made by Dr. Thienhaus, it is interesting to recall the fact that Canon of Berlin some years ago recommended daily plate cultures of the blood in cases of severe local septic infection, and in case the bacteria—streptococci especially— were found to multiply rapidly, then to amputate. Now, whether or not any such methods as that are capable of practical application, is a matter for future experience to tell.

The reference by Dr. Weber to the necessity of taking large quantities of blood, rests, of course, upon well-established facts. We must take large quantities of blood for two reasons: First, in order to secure as many bacteria as possible, and next, in order that we may have quantities enough to inoculate many flasks of large quantities of media, and in that way dilute the serum; because, if the serum stands after the blood has been removed from the body, the bactericidal power certainly increases, and it destroys typhoid bacilli, at any rate, quite promptly.

Indeed, we have right here a very interesting point in regard to the development of typhoid, viz., that human blood serum is promptly bactericidal to large quantities of typhoid bacilli and yet in typhoid fever we have typhoid bacilli multiplying in the blood. Now, what happens we do not as yet understand at all.

I think it would be better if we would agree to call all these different diseases in which bacteria occur in the blood in large quantities, bacteriemias rather than septicemias, because that would be a more clearly understood term.

Finally, I second most heartily Dr. Herrick's suggestion as to the rural laboratory, and it seems to me that here is the solution of the question that laboratory people often discuss, viz., how are we to make the different laboratory procedures available for the general practitioner?

THE DIAGNOSIS OF PERICARDITIS.*

By L. F. JERMAIN, M. D.,
MILWAUKEE.

Although pericarditis is not an uncommon affection, the disease in its various phases is often overlooked; not so much through lack of knowledge of the symptoms and signs of this disease, but rather through lax methods in our physical examination of the heart and erroneous conclusions arrived at from hasty physical exploration. Plastic pericarditis may be present without giving rise to any symptoms, and unless careful auscultation be practised daily in the course of acute infectious fevers its presence may not be suspected. In other cases the general and constitutional disturbances of the primary disease may obscure the symptoms to which the local disturbance in the pericardium gives rise.

In our diagnosis of pericarditis, therefore, we must rely mainly upon the presence of physical signs indicative of pathological change

*Read before the Central Wisconsin Medical Society, Beloit, April 28, 1903.

in the pericardium. In simple plastic pericarditis pain is a variable symptom and may be absent. It is, as a rule, not excited by pressure. The pain is referred to the precordia or to the xiphoid cartilage, and in the presence of effusion may radiate toward the left shoulder and arm. The pain may be sharp and stabbing or merely a sense of distress in the cardiac region. In cases of marked effusion pressure on the lower end of the sternum aggravates the pain. In growing children pain is often absent entirely. A deep pain between the scapulæ was noticed in a few cases by Sibson and this pain was increased on swallowing and eructation. In large effusions the pain is not often stabbing or lancinating in character, but partakes of the nature of precordial uneasiness, oppression, tightness, anxiety and a fear of impending death.

Fever is usually present in a moderate degree, and in rheumatic cases hyperpyrexia has been observed. The fever is often of an irregular remittent or intermittent type. Respiration is hurried and in children may be alarmingly frequent. Marked dyspnea is often present and should always excite suspicion of grave disorder. As the effusion increases the breathing becomee more and more difficult and there is often persistent orthopnea. The pulse-respiration ratio is altered from the normal to 3-1 or even 2-1. A short, irritable cough may be present in large effusions and a distressing painful hiccough is an occasional symptom. The dyspnea is produced in part by compression of the left lung by the effusion, and in part by direct pressure upon the right heart, thereby impeding the cardio-pulmonary circulation. Pulsus paradoxus, asymmetry in size of pulse of radials and unequal pupils are common in large effusions. Dysphagia is occasionally present, mainly the result of the pressure of a large effusion upon the esophagus. The onset of pericarditis may be announced by marked nervous disturbance such as headache, dizziness, restlessness and delirium of a low, muttering type, or maniacal requiring restraint. Melancholia with suicidal tendencies may supervene.

Physical Signs. During the early stages the signs present are those produced by the roughened pericardial surfaces rubbing against each other during the movements of the heart, producing pericardial friction-fremitus or thrill and friction murmurs or sounds. The friction-fremitus is present in only a small proportion of cases and is always accompanied by a loud friction sound. Careful palpation with the finger tips is necessary to elicit this sign. It gives the impression of being peculiarly superficial, is systolic in rhythm and begins and ends rather abruptly. The pericardial friction sound is more or less circumscribed and is never conducted in the directions peculiar to intra-cardiac murmurs. It usually has a double to-and-

fro rhythm, being both systolic and diastolic. Pressure with the stethoscope over the lower part of the sternum, and full inspiration increase the intensity of the sound. Change of position often affects the intensity of the sound; it becomes more audible by bending the body forward. As fluid collects in the pericardial sac a definite group of signs make their appearance. Friction sounds usually disappear except over the base of the heart where they may persist in spite of a large effusion. In growing subjects pericardial effusion will cause a distinct bulging of the precordial region—the margin of the sternum and left costal cartilages are pushed forward while the ribs are raised upward. A prominence in the epigastric region has also been noticed in cases of abundant effusion. One of the peculiar effects of a free accumulation of fluid is a real or apparent elevation of the apex beat to the 4th or 3rd interspace. Most observers at present agree that the impulse is not that of the apex but rather of the base of the heart, and that the apex is pushed inward by the effusion.

One of the most characteristic signs of pericardial effusion is the increase in the area of cardial dulness, with change in its shape and outline. Increase in the area of dulness is first noticeable at the base of the heart, and Sansom maintains that marked dulness above the 3rd rib indicates pericardial effusion. Laterally the dulness may extend from the right mammary line to an inch outside of the nipple line or to the axillary line on the left side. Of importance in diagnosis is the shape of the dulness which corresponds to the shape of the sac, being more or less pyriform with its apex above and base below. In extreme distension, however, this characteristic shape may be entirely lost. The dulness in extensive effusion is very striking, as is also the resistance offered to the percussing finger. Among the earliest signs of pericardial effusion is dulness in the 5th intercostal space to the right of the sternum. As the fluid increases in amount the heart sounds become progressively weaker and seem distant, due probably to imperfect transmission of sounds through intervening fluid and enfeeblement of the heart's action. In cases of extreme effusion heart sounds may be entirely absent over the whole precordial region. Larger pericardial effusions invariably produce compression of the left lung with deficient movement of that side, dulness upon percussion over an area at the angle of the scapula with increased vocal fremitus, bronchial breathing and bronchophony. Ewart has called attention to tubular breathing below the right nipple in severe cases. In doubtful cases the effects of change of posture may be of great service in arriving at a diagnosis. An apex not perceptible in the recumbent posture and which becomes so when the patient sits up or

bends forward, indicates pericardial effusion. The relative loudness of cardiac sounds is similarly influenced.

During the progress of absorption of pericardial effusion the signs indicative of effusion progressively diminish. Friction signs, if they have been obscured by the effusion, reappear for a while, and signs indicative of adherent pericardium may be observed during the period of convalescence.

Pericardial adhesions and pericardial thickening are commonly found at autopsies, but are rarely diagnosed intra vitam. In a large proportion of cases they are simply partial and small, between contiguous surfaces of the pericardium, assuming the form of filaments or threads and do not give rise to symptoms or signs. The cases which do give rise to well defined symptoms and signs are those in which the adhesions are both external and internal, there being a general matting of the sac to the heart, to the chest wall, to adjacent pleura or to the diaphragm, and to structures in the mediastinum. The more pronounced the pericardial changes the more prominent and definite the clinical phenomena are likely to be. Enlargement of the heart is usually present, due mainly to the additional work placed upon the heart by the hampering of its movements. Broadbent says, "When the heart is found enlarged as the result of adherent pericardium, there being no valvular disease to account for it, it is due to the fact that it has been left in a condition of dilatation after the original attack of pericarditis, and that while in this condition of dilatation the pericardium has become adherent; then the adhesions become organized, the heart is effectually prevented from again assuming its normal size. Subsequently it undergoes some hypertrophy."

That pericardial adhesions do give rise to pain cannot be doubted; painful, dragging, pericardial oppression, inability to take a deep breath and attacks of an anginal character are some of the sensations complained of. The heart's action is often irregular or unequal and it may be so embarrassed as to lead to actual syncope. A prominent group of symptoms arises from the disturbed action of the right ventricle and consequent interference with the general venous circulation. The arterial pressure is lowered and venous pressure heightened, and as a result we have congestion of the lungs, with shortness of breath on exertion, attacks of dyspnea, cyanosis, bronchitis and hemorrhage from the lungs, passive congestion of the liver, kidneys, digestive tract, and general dropsy. An interesting class of cases are those in which the clinical features of atrophic cirrhosis of the liver are present. These are rarely recognized as cases of pericarditis, as the primary condition is overlooked because of the

preponderance of symptoms of portal obstruction. The signs of adherent pericardium are systolic retraction of one or more interspaces in the region of the apex beat, and systolic retraction of the epigastrium. The apex beat is fixed in its position wherever it may be and cannot be modified by any change of posture. The impulse of the beat is often decidedly undulatory in character, the wave passing from base to apex. Broadbent describes a systolic sinking in of the 10th and 11th intercostal spaces below the inferior angle of the scapula. Inspiratory distension of the external jugulars instead of collapse is often noticed. Friederich regards diastolic collapse of the cervical veins when associated with systolic retraction of intercostal spaces a most valuable sign of adherent pericardium. Auscultation sometimes elicits friction sounds which may be pericardial or pleuro-pericardial in nature. In cases of adherent pericarditis in which the aorta and vena cava superior are involved in adhesions, deep inspiration gives rise to a condition known as pulsus paradoxus, probably produced by traction upon the aorta, thereby narrowing the lumen of that vessel.

Two Cases of Appendicitis and Some Deductions Therefrom.—E. R. SECORD (*Amer. Med.*, July 11, 1903) gives a good description of two cases of appendicitis which, without operation, would in all probability have resulted in perforation.

The symptoms in these cases were at no time severe. Both cases had had previous mild attacks. Opium would have completely masked all symptoms. Adhesions in the first case showed the results of former attacks. The swollen, hard distal end, very dark livid color, and lusterless peritoneum gave evidence of commencing gangrene and perforation.

In the second case, after four days of slight abdominal pain, with very little rise in temperature or pulse rate, an adherent appendix was found with the tip buried in an abscess containing foul smelling pus. A distinct ulcer was found on opening the appendix.

The author concludes, "I would like to make a strong protest against the description of opium as the abiding resource of the great mass of conscientious physicians, and also against the charge that those who believe in the operative treatment are more thoughtful of enhancing their skill in abdominal surgery than of their patient's welfare. Morphine will relieve the pain and tenderness, remove rigidity, etc., but it will not prevent the perforation of a gangrenous appendix nor absorb the pus from an abscess."

(F. E. W.)

WISCONSIN MEDICAL JOURNAL.

OFFICIAL ORGAN OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A Monthly Journal, published by the Wisconsin Medical Journal Publishing Co., and owned by and devoted to the interests of the Medical Profession of this State.

Original articles, Clinical notes, Correspondence, and Communications of interest to the Medical Profession are solicited. Reprints of articles contributed to this Journal will be furnished at cost price, but a number of copies of the Journal will be furnished contributors gratis. All manuscripts should be typewritten.

ARTHUR J. PATEK, A. B., M. D., Editor,
121 Wisconsin Street, Milwaukee.

Associate Editors.

CHAS. S. SHELDON, M. D., Madison.
OTTO H. FOERSTER, M. D., Milwaukee.
HOYT E. DEARHOLT, M. D., Milwaukee.
ALBERT W. MYERS, M. D., Milwaukee.

Collaborators:

Horace M. Brown, M. D.,	Milwaukee	U. O. B. Wingate, M. D.,	Milwaukee
Arthur J. Burgess, M. D.,	"	Chas. Zimmerman, M. D.,	"
Richard Dewey, M. D.,	"	Frank H. Edsall, M. D.,	Madison, Wis.
Louis Frank, M. D.,	"	W. E. Fairfield, M. D.,	Green Bay, "
Walter Kempster, M. D.,	"	Wm. E. Ground, M. D.,	W. Superior, "
William Mackie, M. D.,	"	Julius Noer, M. D.,	Stoughton, "
Solon Marks, M. D.,	"	Chas. W. Oviatt, M. D.,	Oshkosh, "
P. H. McGovern, M. D.,	"	L. H. Prince, M. D.,	Palmyra, "
Gilbert E. Seaman, M. D.,	"	H. Reineking, M. D.,	Sheboygan, "
Wm. H. Washburn, M. D.,	"	W. T. Sarles, M. D.,	Sparta, "

Annual Subscription, - - - $1.00. Single Copies, - - - - - $0.10.

Address all business communications to
M. M. TAYLOR, Business Manager,
709 Herman Bldg., Milwaukee, Wis.

Vol. II. AUGUST, 1903. No. 3.

EDITORIAL COMMENT.

THE STRUGGLE OF THE BODY AGAINST TUBERCULOSIS AND ITS IMMUNIZATION.

At the International Medical Congress, held at Madrid in April of this year, Prof. Edoardo Maragliano of Genoa contributed an article on the above subject. The various steps upon which his results are based, and the clinical success that his methods have encountered, warrant a resumé of the subject.

The tuberculous poisons have, according to Maragliano, a double origin: in part the secretions of the bacillus during its biologic activity, and in part the material enclosed in its own body; therefore it

becomes necessary not only to neutralize the poisons thrown out, but to prevent further growth and cause the destruction of existing bacteria. Of prime importance is the neutralization of the tuberculous poisons, because they make the soil favorable for the development of the bacillus.

That the normal organism is found to possess some means of defence against tuberculosis, is shown by the reduction in toxicity of a dose of tuberculous poison injected into the rabbit, when it (the poison) is first mixed with a certain quantity of human serum. Human serum stands highest in the scale of antitoxic power, while there is no trace of this in the guinea pig or rabbit, in fact the bacillus of tuberculosis may be cultivated with ease in the pure serum of the guinea-pig.

Agglutination is the expression of a process of immunization, of a special defensive energy of the organism, and thus we find that the sera of various animals possess the power of agglutinating in varying degree homogeneous cultures of the bacillus tuberculosis. The guinea-pig, on the contrary, does not as a rule possess this power at all.

The serum of a healthy man showing no actual sign of tuberculosis, possesses a certain agglutinating—hence antitoxic power. Furthermore, Maragliano—by experiment in man and animals, shows that by repeated inoculations of graded strengths of tuberculous toxins, the antitoxic—hence defensive power of the organism is gradually increased, and that at the end of a month of such inoculations the antitoxic unit can be raised to double and triple the normal amount. He demonstrated also that it is the bacilli, whether living and active or dead and dried, that give rise to these defensive antibodies.

Animals vary in power to destroy bacilli introduced. Bacilli introduced into the dog were early disintegrated and absorbed, while in the guinea-pig they were recovered without having changed much in their cultural characteristics. That the condition of the soil materially affects the toxins injected, was shown in the reduced resistance offered in cases in which the organism was below par. This is borne out by clinical testimony.

Such being the case, Maragliano concludes that the fight against tuberculosis must be directed towards increasing the defensive forces of the body, and it is to this end that he has directed his efforts.

Following out these plans he has therefore attempted to immunize animals against tuberculosis. As long ago as 1895 he announced at the Congress of Internal Medicine at Bordeaux, that "progressive vaccinations, according to the methods that I have followed, immunize dogs against the injection of very virile human tuberculosis in their

veins," and the animals then under observation are still immune. Behring made a similar observation in 1903.

Two methods of immunization are possible, the active and the passive. The active method refers to the injection of virulent cultures in varying degree, thus bringing about a gradually increasing antitoxic resistance; the passive consists in the inoculation of the serum of animals actively treated, (i. e. immunized) and in this manner causing a defensive reaction. The latter method is, for evident reasons, the only one experimentally applicable in man, and tests made in healthy individuals show that it is possible to increase the agglutinating and antitoxic properties of their blood serum, hence to raise their defensive power.

Now to the practical results, and if these can be reproduced in the experience of others, the world may indeed raise a pæan of praise to Signor Maragliano. As the most striking example of the result of his work, he cites the case of a family of 11 children, all of whom were tuberculous. Four had died prior to the family's coming under observation. The remaining 7 were treated by means of progressive antitoxin injections, and are to-day, ten years after treatment and in spite of poor hygienic surroundings, perfectly well.

As Sclavo has proven for diphtheria, and Mercatelli for the pest vaccine, so has Maragliano proven for tuberculosis that it is possible to immunize the individual by introducing the serum into the digestive tract, instead of directly into the body.

The latest problem to which this scientist is applying himself, is: how to obtain immunization by producing a circumscribed focus of tuberculosis on the surface of the body, and thus—we would popularly term it a 'vaccination' because analogous in principle and intent to the inoculation of vaccine—render the individual immune to tuberculosis infection. After making the experiment upon animals, he has begun the operation upon man. the inoculation resulting in a small circumscribed tuberculous ulcer, with suppuration that is entirely sterile, and a fever course of two or three days. No further symptoms are noted.

It is too early to foretell the results of this preventive inoculation, but the reasoning the eminent investigator has followed out in all the various steps pursued, and the logical deductions he has drawn from known facts and experimental results, grant him consideration and a hearing from the entire medical and lay world, and make us impatient for the startling news that the means have been discovered, which—we trust—will, in the not too distant future, be ours to employ for the benefit of mankind.

A MODEL SANITARIUM FOR THE TUBERCULOUS.

We are in receipt of the eighteenth annual report of the Adirondack Cottage Sanitarium, situated at Saranac Lake, N. Y. This institution is controlled by a board of trustees and is under the management of Dr. Edward L. Trudeau. It was founded eighteen years ago by Dr. Trudeau, himself a "lunger" at that time, who—appreciating what this pure mountain air had accomplished for him—set about to establish quarters where others similarly afflicted could enjoy like benefits. The aid of philanthropic gentlemen was secured, and from a small beginning the present magnificent array of buildings has—by gradual growth—been secured.

As the name implies, the Sanitarium is built on the cottage plan, and the watchful eye of the founder and director has ever been fixed upon the principle of an abundance of fresh air and sunlight for his patients. The group of buildings, clustered upon the mountain side, is a most picturesque sight, and the happy faces of the patients to be seen bear testimony to the benefits there derived. Many of the cottages built in the past year have been erected to the memory of dear loved ones who had succumbed to tuberculosis. Each house is a lasting monument to the donor, for each adds to the number of afflicted for whom restoration of health is thus made possible.

Dr. Trudeau has proven that high altitude is not the essential in the treatment of tuberculosis. (Saranac Lake is but 1,600 feet above the sea level), but that where pure air can be obtained, there good results may be looked for. A visit to the institution and vicinity last fall convinced us that the Adirondacks have some advantages over the places of very high altitude, the principal point of preference being the fact that tuberculous patients may—after recovery—usually return with impunity to their former homes in lower altitudes, while it is quite common that invalids who have regained their health in a high altitude cannot return home without seriously risking relapses. Of the 165 patients whose cases are reported, 30 per cent. were apparently cured, in 41 per cent. the disease was arrested, 19 per cent. were improved, 7 per cent. unimproved or failed, 2 per cent. doubtful, 1 per cent. died Of 143 patients whose average residence at the sanitarium was seven months, 30 of the 40 incipient cases were apparently cured. Almost all the patients gained in weight during their stay, the average increase being 15.9 pounds.

We must bow in homage to Dr. Trudeau, for he has done a marvelous work.

If such results as his are obtainable in New York state, similarly

good results are possible in our own state. Some day the sanitarium agitation will be successful, and it will be our everlasting regret that the hundreds who had clamored for the return of health were deprived of the opportunities the State of Wisconsin could have afforded them, but would not.

GROWING YOUTH, HEALTH AND THE NERVOUS SYSTEM.

No subject is of more importance than the mental, moral, and physical training of the child and growing youth of our land.

History indicates that body, mind, and morals are the trinity of essentials for the welfare of individuals and nations. This being the case, and viewing facts from a utilitarian standpoint alone, it behooves physicians, parents and educators to face the matter of parenthood in its broadest aspects. Such articles to the laity as one appearing in the *Cosmopolitan,* for June, 1903, by Herbert George Wells under the general heading "Mankind in the Making," are of inestimable educatory value.

The symposiums of the Section on Nervous and Mental Diseases of the American Medical Association, and of the American Academy of Medicine for 1903 "Psychoses in Relation to the Public School Methods" and "Hygiene and the Public School" resp., also the discussion upon the matter of "Medical Legislation as to the Public Schools" held by the Medical Society of New Jersey in June, 1903, all show that the child is being overworked by present day methods of education. The average child is "crammed" in the getting of facts, and there results a proportionate loss of memory from such overwork, together with the thus induced physical and mental lack of resistance of his Godgiven being.

The rapid advances in all avenues of thought and science to-day, and the failure to remember that the human body has not changed materially the while, is the basic reason for the degeneration of our methods of education, and the defeat of our aims for an ideal higher growth of the race.

Time has come to call a halt and do what Emerson has said is the most difficult of tasks, "think" it over. Ways and means of preventing overwrought nervous systems must come if we are to lead the cause of advance of humanity.

Let us work it out carefully and at once.

NEWS ITEMS.

Strauss Pasteurizing Plant, Milwaukee.—A trained nurse will be placed in charge of the laboratory of the milk commission of the Children's Free Hospital instead of a chemist, as was first contemplated. Dr. Thomas H. Hay, who has charge of the preparations for the laboratory, is of the opinion that everything will be in readiness for the distribution of modified and pasteurized milk by Aug. 10th.

It has been planned to distribute circulars printed in German, Polish and English explaining the uses of the milk and all directions for securing it among the residents in the vicinity of the stations where the milk will be sold.

The following instructions from the milk commission to the distributing centers will hold good at least temporarily:

A deposit must be made by the purchaser on each of the bottles and corks purchased for the first time. On every succeeding purchase the empty bottles and corks must be brought back in good condition, otherwise purchaser must make a fresh deposit. For instance: A purchaser takes four pint bottles of whole milk for the first time and makes a deposit of 20 cents for the four bottles and 4 cents for the four corks. If he comes on the second day without any bottles and corks he must make the same deposit over again, even if he promises to bring back the bottles and corks purchased on the preceding day in good condition. If he comes on the second day with three bottles and wishes to take back four bottles he must make a deposit on one bottle.

It is plain that a purchaser might buy two quarts daily, and yet his original deposit of 24 cents would be sufficient for the whole season, provided he lost or broke no bottles, and brought back each day the bottles purchased on the preceding day. This rule should not be deviated from except in special emergencies.

The deposit for pint bottles is 5 cents each, and 1 cent for each cork. The deposit for six ounce bottles in which the modified milk is contained is 3 cents per bottle and 1 cent for each cork.

Whole milk in pint bottles is to be sold for sick adults and healthy young children over 15 months old, unless a physician prescribes modified milk. The price of whole milk is 3 cents per pint bottle, two pint bottles for 5 cents.

Modified milk and barley water sell for 1 cent per feeding, in six ounce bottles.

The four formulæ of modified milk are to be sold for all infants under 15 months of age and for all sick infants under 2 years of age.

Healthy infants 1 month to 5 months will probably be best suited by formula No. 2.

Formula No. 3 is for healthy infants from 5 to 10 months and for sick infants of somewhat greater age.

Formula No. 4 is suitable for healthy infants from about a year to a year and a half and for older sick children.

The above is approximate, and we strongly advise a physician's prescription, when possible, for every infant using modified milk.

After two weeks it is expected that the distributing stations will be able to make exact orders and the cost of any milk ordered but not sold will have to be borne by the distributing station.

It is safe to keep selling milk for twenty-four hours, because at present all the milk is being pasteurized.

Please instruct the consumers to wash the bottles immediately after using and to bring them back in as clean a condition as possible. This is important and ought to be insisted upon.

Milk taken off the ice should not be given immediately to young children without being slightly warmed.

These circulars will be distributed broadcast in the populous parts of the city.

Statistics on Wisconsin's Use of Milk.—Interesting figures relative to the consumption of milk in eight of the largest cities in Wisconsin are contained in a report made public by the Department of Agriculture, Washington. It is estimated that the milk supply of Milwaukee amounted in 1900 to, appproximately, 24,650 gallons daily, indicating an average daily supply per capita of considerably more than three-fifths of a pint. As a result of local supervision, says the report, there has been a slight improvement in the composition and cleanliness of milk. In this connection suggestions are made for Milwaukee as follows:

"Needed improvements include the application of the tuberculin test so far as practicable; a municipal milk farm and laboratory to produce milk for infants' use; more perfect control of the sanitary conditions at the dairies outside the city limits; more economical delivery, and an intelligent enforcement of the milk laws and ordinances."

The estimated daily consumption of milk in Racine is 1,800 gallons. The city authorities are criticised for their failure to enact an ordinance providing for an adequate supervision of the dairies. La Crosse consumes 1,000 gallons a day; Green Bay, 600 gallons; Marinette, 464 gallons, and Waukesha, 395 gallons.

Health Commissioner Schulz, of Milwaukee, and Dr. Wingate, Secretary of the State Board of Health, take exception to the implied criticisms of the above report.

Dr. Schulz says: "Whoever gathered the information which led to the suggestions did not know what he was talking about. I would not say a word were it not for the fact that this city has the lowest mortality rate of any city of its size in the country, and the milk inspection system also compares with any other.'

"The report suggests that the local department make the tuberculin tests. This proposition on the face of it is absurd, as it is impossible for us to do this. If any such test is made it should be by the State Board of Dairy and Food Commissioners. and not by the local board. The test is not made with the milk, but with the animals themselves, and we have no jurisdiction outside of our own limits."

Additions to the Faculty of the Milwaukee Medical College.— The following additions and changes in the Faculty of the Medical Department of the Milwaukee Medical College for the ensuing year are announced:

Dr. E. W. Bartlett, Milwaukee, Emeritus Professor of Ophthalmology and Otology; Dr. John T. Scollard, Milwaukee, Internal Medicine; Dr. Thomas Fitzgibbon, Milwaukee, Gynecology; Dr. Sanger Brown, Chicago, Neurology and Psychiatry; Dr. Frederick Mueller, Chicago, Orthopedic Surgery; Dr. Wm. J. Cronyn, Milwaukee, Medical Jurisprudence; Dr. Franz Pfister, Milwaukee, Associate Professor of Rhinology and Laryngology; Dr. G. G. Zohrlaut, Milwaukee, Clinical Assistant in Gynecology; Dr. J. C. Zartzin, Milwaukee, Assistant in Medicine; Dr. G. F. Mason, Milwaukee, Laboratory In-

structor; Dr. W. T. Nichols, Milwaukee, Clinical Assistant in Gynecology; Dr. J. W. Kleinboehl, Milwaukee, Clinical Assistant in Gynecology; Dr. H. S. Steenberg, Milwaukee, Instructor in Biology; Dr. J. J. Seelman, Milwaukee, Clinical Assistant in Medicine and Instructor in Pathology; Dr. W. S. Stanley, Milwaukee, Instructor in Ophthalmology and Otology; E. F. Kowalke, Ph. G., Milwaukee, Instructor in Chemistry.

Tuberculosis Commission.—In accordance with a joint resolution adopted by the last Legislature, Gov. La Follette has appointed a state commission of three members to investigate the subject of tuberculosis and the advisability of establishing a state sanitarium for the cure of persons affected with that disease. The commission is to report to the next Legislature.

The commission appointed consists of Dr. Gustav Schmidt, of Milwaukee; Dr. H. L. Russell, Bacteriologist of the State University, and Dr. Michael Ravn, of Merrill. The commissioners are to serve without pay.

Milwaukee's Low Death Rate.—According to the monthly report of the Health Department of Milwaukee there were 252 deaths in June, representing a death rate of 9.79 per 1,000, as against 330 for the preceding month with a rate of 12.36, and 294 deaths for the corresponding month of 1902, and a rate of 11.95. This rate of 9.75 is the lowest rate Milwaukee ever had, except that of February, 1898, which was 9.60. During the month of July the mortality rate was 11.60 per 1,000, as compared with 12.35 for July, 1902.

Dr. John Phillips, of Stevens Point, Wis., died July 27th. A graduate of Rush Medical College 1852, Dr. Phillips has practiced at Stevens Point since 1848, and has always been regarded as one of the leading physicians of his community. He took an active interest in public affairs and represented his district in the State Senate for several terms. Dr. Phillips was an old and highly respected member of the State Medical Society.

State Board of Medical Examiners.—The Governor has made the following appointments to the State Board of Medical Examiners: Dr. L. F. Bennett, Beloit; Dr. W. T. Sarles, Sparta; Dr. F. P. Klarr, Horicon; Dr. A. P. Andrus, Ashland.

Sheboygan Doctors Organize.—The Physicians' Business Association of Sheboygan has been organized with these officers: President, W. H. Guenther; Vice-President, H. D. Squire, G. W. Crosby and O. J. Gutsch; Secretary, H. O. Reich; Treasurer, O. B. Bock.

The Emergency Hospital, Waukesha, has been established and has entered into a contract with the city to take care of all city charges at a rate of $7 per week.

THE STATE MEDICAL SOCIETY OF WISCONSIN.

ORGANIZED 1841.

Officers for 1903-1904.

F. E. WALBRIDGE, Milwaukee, President.
JAMES MILLS, Janesville, 1st Vice-Pres. C. C. GRATIOT, Shullsburg, 2nd Vice-Pres.
CHAS. S. SHELDON, Madison, Secretary. S. S. HALL, Ripon, Treasurer.

Provisional Councilors.

1st Dist., J. G. Meachem, - - - - Racine.
2nd Dist., J. S. Walbridge, - - - - Berlin.
3rd Dist., C. S. Smith, - - - - - Elroy.
4th and 5th Dist., G. A. Kletzsch, - Milwaukee.
6th Dist., H. Reineking, - - - Sheboygan.
7th Dist., W. T. Sarles, - - - - Sparta.
8th Dist., J. F. Pritchard. - - Manitowoc.
9th Dist., T. J. Redelings, - - Marinette.
10th Dist., J. M. Dodd, - - - - Ashland.
11th Dist., E. L. Boothby, - - - Hammond.

Next Annual Session, Milwaukee, June, 1904.

The Wisconsin Medical Journal, Official Organ.

SOCIETY PROCEEDINGS.

COUNTY REORGANIZATION.

It is a great comfort to be able to use the JOURNAL to reply to numerous letters from physicians in the state asking information about our plan of reorganization, formation of County Societies, and granting of Charters, etc. It is possible to go into detail more fully than in personal letters.

GENERAL PLAN OF REORGANIZATION.

The unit and basis of the whole organization is the County Society. Membership in the County Society—where one exists—is the only means of retaining membership in the State Society and the American Medical Association, or of entrance into those bodies. Hence it is vitally important that all who wish to be an organic part of the medical profession should join their county organization.

To make the plan complete it is necessary to organize a medical society in each county in the state, with the proviso that in counties having a very small number of physicians two or more counties may unite.

In organizing these societies an invitation should be sent to every legally qualified physician in the county who is willing to abide by the Constitution and By-Laws of the State Society. The meeting should be held at some central point accessible to all. The aid and advice of the Councilor of the district should be invoked, and his

presence secured at the meeting of organization. The necessary blanks—including a sufficient number of copies of the "Constitution and By-Laws for County Societies"—can be procured from the Councilor of the district.

This Constitution may be modified to suit the wishes of the Society, provided that such changes do not conflict with the Constitution of the State Society. Still, as great a degree of uniformity as possible in all the County Societies is very desirable.

COUNCILORS AND COUNCILOR DISTRICTS.

A Provisional Council has been appointed and the state divided into 10 Councilor Districts corresponding to the present Congressional Districts, as follows:

1st District: Green, Kenosha, Racine, Rock, La Fayette and Walworth,
Dr. John G. Meachem, Racine, Councilor.

2d District: Adams, Columbia, Dane, Green Lake, Jefferson and Marquette,
Dr. J. S. Walbridge, Berlin, Councilor.

3d District: Crawford, Grant, Iowa, Juneau, Richland, Sauk and Vernon,
Dr. C. S. Smith, Elroy, Councilor.

4th and 5th Districts: Milwaukee and Waukesha.
Dr. G. A. Kletzsch, Milwaukee, Councilor.

6th District: Dodge, Fond du Lac, Ozaukee, Sheboygan and Washington,
Dr. Herman Reineking, Sheboygan, Councilor.

7th District: Buffalo, Clark, Eau Claire, Jackson, La Crosse, Monroe, Pepin and Trempealeau,
Dr. W. T. Sarles, Sparta, Councilor.

8th District: Calumet, Manitowoc, Portage, Waupaca, Waushara, and Winnebago,
Dr. J. F. Pritchard, Manitowoc, Councilor.

9th District: Brown, Door, Kewaunee, Marinette, Oconto, and Outagamie,
Dr. T. J. Redelings, Marinette, Councilor.

10th District: Ashland, Florence, Forest, Iron, Langslade, Lincoln, Marathon, Oneida, Price, Shawano, Taylor, Vilas, and Wood,
Dr. J. M. Dodd, Ashland, Councilor.

11th District: Barron, Bayfield, Barnett, Chippewa, Douglass, Dunn, Pierce, Polk, St. Croix, Sawyer, and Washburn,
Dr. E. L. Boothby, Hammond, Councilor.

According to the Constitution of the State Society the only dues which are fixed is an annual tax of $2 per capita on all members of

County Societies. This is collected by the County Society and is payable to the Secretary of the State Society between the 1st and 10th of April in each year. For the present year, however, all who are now members of the State Society will pay the usual fee of $3 directly to the Treasurer, Dr. S. S. Hall, as formerly. This is proper since a large number had already paid their dues for 1903 when the new constitution was adopted.

Each County Society determines its own dues and admission fees. If the annual dues are $1 the total dues to both County and State Societies will be only $3. It is suggested that the admission fee for charter members be $2 which will include the dues till Jan. 1, 1904. This will entitle them to the JOURNAL as soon as the Secretary of the Society "shall forward its assessment together with its roster of officers and members—and list of non-affiliated physicians of the County to the Secretary of the State Society."

CHARTERS.

Blanks for applications for Charters, and for "roll of membership for Counties" can be procured from the Councilor of the District. Applications for Charters, endorsed by the Councilor of the District, can be made at any time to the Secretary of the State Society. They should be accompanied with the roll of membership fully made out according to the blank.

These will be passed upon by the Council and granted as soon as possible. The year is rapidly passing and it is vitally important that county organization be pushed as rapidly as possible. The Councilors and Officers of the Society are ready to help, so do not fail to call upon them in every difficult place.

C. S. SHELDON, M. D., *Secretary.*

BROWN COUNTY MEDICAL SOCIETY.

The regular quarterly meeting of the Brown County Medical Society was held in the Court House, Green Bay, on July 9. The evening was given up to the consideration of typhoid fever and appendicitis. The discussion of typhoid fever was conducted under the following heads:

Etiology and Morbid Anatomy, . . .	Dr. W. E. Fairfield.
Use of Cold Baths and Antipyretics, . .	Dr. A. W. Slaughter.
Complications, ...	Dr. R. E. Minahan.

Hemorrhage and its Treatment, . . .	Dr. W. Nicholson.
Temperature and its Management, . .	Dr. Wolter.
Diet and the use of Antiseptics, . . .	Dr. M. Z. Vermeiren.
Care of the Eyes in Typhoid Patients, . .	Dr. Hagen.
Treatment of Typhoid without Complications,	Dr. B. C Brett.
Abortive Form of Typhoid, . . .	Dr. R. C. Buchanan.
The Woodbridge Treatment of Typhoid, .	Dr. W. H. Bartran.

In the consideration of Appendicitis which followed, the Diagnosis and Etiology were discussed by Dr. F. N. Brett; The Use of Cathartics, by Dr. O'Connor; When Should we Operate, by Dr. J. R. Minahan; and the Medical Treatment of Appendicitis, by Dr. A. C. Mailer.

W. T. HAGEN, M. D., *Secretary.*

DOUGLAS COUNTY MEDICAL SOCIETY.

At the regular monthly meeting of the Douglas County Medical Society, held at West Superior, on July 1, Dr. William E. Ground read a paper entitled: "A Plea for Child-Bearing Women." The next meeting of the Society will be held on August 5th.

S. G. PAKE, M. D., *Secretary.*

GRANT COUNTY MEDICAL SOCIETY.

At Lancaster on July 23, the Grant County Medical Society was organized. Twenty-two members were present and the following officers were elected: President, Dr. Joseph Godfrey, Lancaster; vice-president, Dr. James Oettiker, Platteville; secretary and treasurer, Dr P. L. Scanlan, Lancaster; censors, Dr. J. M. Lewis, Bloomington, Dr. G. C. Buck, Platteville, Dr. J. F. Metcalf, Fennimore; delegate, Dr. J. C. Betz, Boscobel.

The plan of County Societies suggested by the State Medical Association was adopted. Three meetings a year will be held on the second Thursdays of May, September, and December.

A dinner was given by Lancaster physicians and a general good time with the best of fraternal feelings prevailed.

The next meeting will be held Thursday, Sept. 10, 1903, at Lancaster, when a literary program will be given.

P. L. SCANLAN, M. D., *Secretary.*

MEDICAL SOCIETY OF MILWAUKEE COUNTY.

Meeting of July 10, 1903.

The president, H. M. Brown, in the chair.

Seven new members were elected.

The following were appointed upon the Committee of Arrangements for the 1904 meeting of the State Medical Society: Drs. A. T. Holbrook, F. Pfister, H. E. Dearholt, E. F. Fish, A. W. Gray.

Dr. H. E. Dearholt read a paper on "Weak Foot," in which he laid stress upon diagnosis, calling attention to the fact that the pain of "weak foot" is frequently assigned to rheumatism or gout, and that many cases, in which pain in the lumbar or dorsal regions is credited to lumbago, pelvic disorders, neurasthenia, etc., are in reality suffering from strain of "weak foot." In treatment he recommended exercise and use of the Whitman steel brace.

Dr. T. H. Hay read a paper on "Eczema in Infancy." He emphasized the necessity of correcting errors in diet, rather than putting too much endeavor upon local treatment.

Dr. J. M. Beffel presented a specimen of Hemorrhagic Pancreatitis.

Dr. C. H. Lemon presented a photograph of a ruptured stomach. He reported that the patient had shown only slight external evidence of traumatism, and that symptoms of shock were absent, but that on autopsy the pancreas was found pulpified and the stomach ruptured.

After the scientific program, a social program was carried out.

Society adjourned to meet the second Friday in September.

A. W. GRAY, *Secretary.*

ST. CROIX COUNTY MEDICAL SOCIETY.

At a largely attended meeting held at New Richmond on July 21, the St. Croix County Medical Society was organized. The election for officers resulted as follows: President, Dr. E. L. Boothby, Hammond; vice-president, Dr. P. McKeon, New Richmond; secretary and treasurer, Dr. L. P. Mayer, Hudson; censors, Dr. Beebe, Glenwood, Dr. Epley, New Richmond, and Dr. Wade, New Richmond, for one, two, and three years respectively.

WASHINGTON COUNTY MEDICAL SOCIETY.

At a meeting held at Braun's Hotel, Jackson, on June 24, 1903, the Washington County Medical Society was organized. The election of officers resulted as follows: President, Dr. E. M. Rogers; vice-president, Dr. Henry Blank; secretary, Dr. G. A. Heidner; treasurer, Dr. J. Reichert; censors, Drs. C. Bossard, W. J. Wehle, and B. A. Hermann. Drs. Blank, Reichert, and Wehle were constituted a committee on by-laws and directed to report at the next meeting which will be held on July 29, at Jackson. The subjects for discussion at this meeting will be: Pott's Disease of the Spine, opened by Dr. Blank; and Lumbago, opened by Dr. Bossard.

G. A. HEIDNER, M. D., *Secretary.*

WAUPACA COUNTY MEDICAL SOCIETY.

At a meeting held at Waupaca on July 28, the Waupaca County Medical Society was organized and the following officers were elected: President, Dr. L. H. Pelton, Waupaca; vice-president, Dr. T. W. Trimble, Waupaca; secretary and treasurer, Dr. J. F. Corbett, Weyauwega; censors, Drs. B. G. Jurgensohn, J. F. Corbett, and Carl Sander, for one, two, and three years respectively. The meetings will be held quarterly and the next one will take place at New London on Sept. 29.

Drs. J. F. Pritchard of Manitowoc and B. C. Gudden of Oshkosh were present at the meeting as visitors.

J. F. CORBETT, M. D., *Secretary.*

BRAINARD MEDICAL SOCIETY.

At the annual meeting of the Brainard Medical Society at the Milwaukee Hospital, July 8, 1903, the following officers were elected: President, Dr. Hugo Philler, Waukesha; vice-president, Dr. L. W. Juergenz, Fredonia; secretary and treasurer, Dr. N. E. Hausmann, Kewaskum; censor for 3 years, Dr. Comfort, Milwaukee.

Dr. Comfort delivered the annual presidential address on the subject: "The Diseases of my last Decade of Professional Service."

The Committee on Obstetrics reported as follows: "Diagnosis of the Position of the Foetus in Utero" by Dr. Wm. Scott, Port Washington; "Management of the First and Second Stages of Normal Labor," by Dr. G. A. Heidner, West Bend; "The Third Stage of Labor," by Dr. B. McShane, Hales Corners.

Dr. Neilson of Milwaukee and Dr. Blank of Jackson discussed the "Symptomatology and Etiology of Meningitis," while Dr. Faber of Milwaukee spoke on the "Treatment of Meningitis."

Dr. Wm. Mackie presented a pathological specimen consisting of a pregnant uterus with a large fibro-myoma which had been removed to save the life of the mother which had been endangered by a terrible hemorrhage at the last confinement. Dr. Comfort presented two cases, an aneurism and a case of insular sclerosis.

The next meeting will be held at the Milwaukee Hospital, October 14, 1903. N. E. HAUSMANN, M. D., *Secretary.*

CENTRAL WISCONSIN MEDICAL SOCIETY.

At the annual meeting of the Central Wisconsin Medical Society held at Madison on July 28, the following officers were elected: President, Dr. Edward Evans, La Crosse; vice-presidents: First, Dr. T. W. Nuzum, Brodhead; Second, Dr. L. V. Lewis, Sun Prairie; Third, Dr. W. H. Palmer, Janesville; Fourth, Dr. C. P. Pickering, Muscoda; secretary and treasurer, Dr. C. S. Sheldon, Madison; censors, Dr. W. F. McCabe, Beloit; Dr. T. W. Evans, Madison; Dr. J. C. Cutler, Verona; Dr. J. L. Fraggatt, Cross Plains.

PHILADELPHIA OBSTETRICAL SOCIETY.

Meeting of April 2, 1903.

The President, Dr. J. M. Fisher, in the Chair.

TREATMENT OF THE COMMON CLINICAL FORMS OF GONORRHEA IN THE FEMALE.

BY DR. R. OLIVER KEVIN.

The author deplored the fact that too little attention was given by physicians generally to the study of gonorrhea in the female and as a consequence the disease is comparatively seldom recognized until the woman has communicated the disease to others. The baneful

effects of gonorrhea in the female were mentioned and asserted to be more serious than syphilis; as evidence of this were cited many cases of pus tubes, peritonitis, cystitis, abscesses, endometritis, etc., which occasioned much suffering and chronic invalidism. The point especially emphasized was the important role played by the infection of Bartholin's glands in propagating the disease to the male and leading to apparently fresh infections in the woman herself; the cause of this is the extreme frequency of involvement of these glands which break down, forming small sinuses full of gonococci which will escape the observation of physicians unless pains are taken to critically examine the Bartholin glands in every woman presenting herself with symptoms of irritation or inflammation of the parts. The following is a classification as to structures involved: Urethra, cervix, vagina, vulva, uterus, rectum and inguinal glands. If the uterus is the seat of an acute gonococcus infection local measures should be avoided owing to the danger of favoring the communication of the disease to the tubes, ovaries and peritoneum. In such cases the patient should be placed in bed and treated on general constitutional principles until the acute stage has subsided, after which injection of one-half ounce of 10 to 20 per cent. solution of argyrol should be carefully made once daily. In involvement of the urethra, a 5 to 10 per cent. solution of argyrol should be made 3 or 4 times daily either by the physician or the patient. The writer stated that since adopting this plan of treatment no involvement of the bladder has been observed in his cases. Should, however, infection of the bladder exist, urinary antiseptics should be administered internally and the bladder be irrigated with weak solutions of silver nitrate, copper sulphate or potassium permanganate, after which half an ounce of a 20 per cent. solution of argyrol is injected into the bladder and allowed to remain. When the urethral follicles or Skene's glands are involved, the urethra should be dilated with ordinary sounds lubricated with Finger's ointment, or preferably 20 per cent. argyrol ointment in lanoline. In some cases the glands are best treated by injection (blunt-pointed hypodermic) with carbolic acid or silver nitrate 20 grains to the ounce.

In gonorrhea of the cervix the parts must be first cleansed of adherent secretions and a few drops of 20 per cent. argyrol solution or 5 per cent. protargol injected with a long-nozzled syringe, care being taken to previously expel all air from the syringe to avoid production of uterine colic. Treatment must be made daily. Tampons saturated with 20 per cent. argyrol solution should be left in contact with the cervix for from 4 to 6 hours in order to obtain the continued gonococcidal effects of the drug.

When the uterus is involved, the organ should be irrigated with any of the following solutions: Creolin, lysol, normal salt solution, potassium permanganate, argyrol, protargol; or a mixture of carbolic acid, sulpho-carbolate of zinc and glycerine. After irrigation a strip of gauze saturated with 20 per cent argyrol solution should be packed in the uterine cavity and allowed to remain. In some cases after subsidence of the acute stage the cervix and entire vaginal mucous membrane should be painted with silver nitrate solution 10 grains to the ounce. For the catarrhal process that remains no combination equals in efficiency a mixture of ichthyol 25 per cent, argyrol 25 per cent and glycerine 50 per cent., used freely as a local application every day or two. Uterine curettement is dangerous when gonorrhea exists.

The author summarized his paper as follows: Always make a thorough examination of the region of Bartholin's glands in suspected cases. If these are infected, flush the vagina with antiseptic solutions, make free incision in the sinuses and glands, remove diseased or necrosed tissue with a curette, and swab the entire surface with 50 per cent argyrol solution, strong carbolic acid, or nitrate of silver. Argyrol is to be preferred because it is non-irritating and possesses deep penetrative power. Never use local treatment in an acute gonorrhea of the uterus, but put the patient at absolute rest and endeavor thereby to prevent the spread of the disease to the uterine adnexa and peritoneum.

Discussion.

DR. MAIER—I have enjoyed Dr. Kevin's paper very much; although his intra-uterine method of treatment at times startled me. It is in this class of cases that we must proceed with exceeding care or we are very liable to bring about an exacerbation of the disease. I think the tendency of the gonococcic infection is to remain more superficial, the micro-organisms lying in and between the epithelial cells. For this reason the object of our treatment should be to bring about a thorough desquamation of the superficial tissues. Ichthyol lends itself very favorably to this. Lately I have been using a 50 per cent. formalin solution with marked benefit.

DR. JOHN C. DACOSTA—The younger Gross, who was most successful in treating these cases, used continually to urge common sense in treating them; and himself used a great deal of common sense in his methods. In the primary inflammatory stage he used the mildest possible remedies. I have not much confidence in the new salts, believing them to be the preparations of manufacturers who are interested in pushing them. Some possibly use them on the principle of the old doctor's advice to his son: "My son, use new remedies while they are fashionable and while they cure." In the chronic cases I use the old-fashioned nitrate of silver in solution of not less than 60 grs. to the ounce, following the application sometimes by salt solution and find that one, or sometimes two applications often cures an old chronic gonorrhea.

DR. KEVIN closes—Swabbing out the uterus will not cure if the gonorrhea is not located there. Gonorrheal vaginitis is very rare. I have seen it but a few times in my life. I have had no experience in the use of formalin. Menge reports success with it in chronic cases. I have been afraid to use it in office practice, and if employed in the uterus I would advise that the cervix be first dilated to give good drainage.

In chronic cases I have found the use of argyrol and protargol satisfactory, also nitrate of silver, although it is not as penetrating as the silver salts protargol and argyrol. I have had good results from them all used in the cervix.

My experience has been that if I am not able to get rid of the purulent tenacious drop at the cervical mouth, to go into the uterus with the old-fashioned treatment of tincture of iodine and carbolic acid, when the character of the discharge will soon change for the better and lose its mucopurulent appearance.

Acholia.—W. B. CHEADLE (*Lancet*, May 30, 1903) remarks that this condition, which is not uncommon, has received little attention from pathologists and clinicians. It is characterized by the absence of bile from the stools without jaundice or signs of obstruction to the biliary outflow from the ducts. In some cases the feces are merely pale, fawn color, or straw color, in others clay-colored only, like putty, but in more extreme and typical cases they are absolutely white. White stools of this character occur not infrequently in persons who live highly or have gouty tendencies, accompanied by malaise, disgust for food, and sometimes a slight yellowness of the skin short of jaundice. A cholagogue purgative and a restricted diet usually set matters right in a few days. But white stools of more persistent character and more serious import also occur, usually in children under five. In these cases the feces are a dirty grey or absolutely white, slightly loose, distinctly greasy, and very offensive. The onset in children is usually abrupt, sometimes accompanied by a slight rise of temperature, appetite fails, the patient becomes pallid and languid and begins to lose weight.

The author narrates 6 cases, all but one in children, in all of which the amount of undigested fat was from 2 to 5 times the normal. Most of the cases were protracted and resisted treatment, but all eventuated in recovery.

He considers the cause to be most probably an inhibition of the secretory action of the liver, due in many cases to a reflex irritation, in children arising most commonly from difficult dentition.

The indications for treatment are to ease the work of the liver especially with regard to fats and starches and to assist its function. Pancreatization of the food should be practiced, hepatic stimulants and intestinal disinfectants are useful. (A. W. M.)

MEMBERSHIP OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

Year of Election.	NAME.	RESIDENCE.	COUNTY.
1894	Abaly, W. C.	Madison,	Dane.
1899	Abraham, Henry W.	Appleton,	Outagamie.
1899	Ackley, S. Breck.	Oshkosh,	Winnebago.
1901	Adams, John C.	West Superior,	Douglas,
1902	Akerly, A. W. K.	Milwaukee,	Milwaukee.
1899	Albers, Herman H.	Allentown,	Washington.
1892	Allen, Stanton.	Milwaukee	Milwaukee.
1886	Amundson, A. C.	Cambridge,	Dane.
1899	Andre, Frank E.	Kenosha,	Kenosha.
1892	Armstrong, Charles A.	Boscobel,	Grant.
1868	Armstrong, L. G.	Boscobel,	Grant.
1903	Arnold, F. W.	Milwaukee,	Milwaukee.
1903	Babcock, I. G.	Cumberland,	Barron.
1889	Bach, J. A.	Milwaukee,	Milwaukee.
1893	Bachhuber, Louis M.	Mayville,	Dodge.
1898	Bading, Gerhardt A.	Milwaukee,	Milwaukee.
1899	Baker, Chas. W.	Trempealeau,	Trempealeau.
1903	Baker, George R.	Tomahawk,	Lincoln.
1900	Baker, Julian C.	Greenwood,	Clark.
1901	Baldwin, Geo. E.	Dartford,	Green Lake.
1881	Ballard, J. A.	La Crosse,	La Crosse.
1903	Barckmann, H. C.	Milwaukee,	Milwaukee.
1899	Barnes, E. C.	Ripon,	Fond du Lac.
1870	Barnes, H. L.	Ripon,	Fond du Lac.
1892	Barnes, J. Steele,	Milwaukee,	Milwaukee.
1873	Barnett, J. R.	Neenah,	Winnebago.
1903	Barth, George P.	Milwaukee,	Milwaukee.
1870	Bartlett, E. W.	Milwaukee,	Milwaukee.
1888	Batchelor, W. A.	Milwaukee,	Milwaukee.
1901	Beard, Edwin A.	Milwaukee,	Milwaukee.
1892	Beebe, C. A.	Fond du Lac,	Fond du Lac.
1897	Beebe, Carl M.	Sparta,	Monroe.
1886	Beebe, D. C.	Sparta,	Monroe.
1903	Beebe, S. D.	Elroy,	Juneau.
1898	Bechman, Chas. R.	La Crosse,	La Crosse.
1894	Becker, William F.	Milwaukee,	Milwaukee.
1898	Becker, Wilhelm	Milwaukee,	Milwaukee.
1900	Beffel, John M.	Milwaukee,	Milwaukee.
1869	Bell, Samuel	Beloit,	Rock.
1900	Bellack, Bernhard F.	Columbus,	Columbia.
1896	Bennett, Lewis F.	Beloit,	Rock.
1894	Bennett, William C.	Milwaukee,	Milwaukee.
1903	Bently, Frederick D.	Portage,	Columbia.
1903	Bernhard, Adelheim	Milwaukee,	Milwaukee.
1894	Beutler, William F.	Wauwatosa,	Milwaukee.
1902	Beyer, Anton J.	Milwaukee,	Milwaukee.
1885	Bill, B. J.	Genoa Junction,	Walworth.
1897	Billmeyer, D. Harrison.	Waupun,	Fond du Lac.
1870	Binnie, John	Poynette,	Columbia.
1896	Bird, Maurice D.	Marinette,	Marinette.
1896	Bird, Rosellette	Beaver Dam,	Dodge.
1878	Bird, H. R.	Madison,	Dane.
1896	Bishop, Thomas W.	Platteville,	Grant.
1901	Black, Nelson M.	Milwaukee,	Milwaukee.

Year of Election.	NAME.	RESIDENCE.	COUNTY.
1900	Blank, Henry	Jackson,	Washington.
1897	Blocki, A. F.	Sheboygan,	Sheboygan.
1897	Bock, Otto B.	Sheboygan,	Sheboygan.
1903	Boden, James E.	Milwaukee,	Milwaukee.
1898	Bodenstab, Wm. H.	New Salem, N. D.	
1898	Boerner, Reinhardt W.	Milwaukee,	Milwaukee.
1899	Bolkcom, Geo. W.	Tower, Minn.	
1888	Boorse, Lorenzo	Milwaukee,	Milwaukee.
1903	Boothby, Eugen L.	Hammond,	St. Croix.
1856	Borden, Wm. H.	Milton,	Rock.
1900	Bossard, Marcus	Spring Green,	Sauk.
1899	Bothwell, Dana F.	Kingston,	Green Lake.
1903	Bowe, Guy C.	Fond du Lac,	Fond du Lac.
1902	Bours, Thos. J.	Milwaukee,	Milwaukee.
1899	Bowen, Chas. F.	Aubrey,	Richland.
1901	Bowman, Frank F.	Madison,	Dane.
1902	Boyce, Samuel R.	Madison,	Dane.
1896	Bradfield, J. A. L.	La Crosse,	La Crosse.
1896	Breakey, Jas. R.	Alma Center,	Jackson.
1897	Breckenridge, H. E.	Racine,	Racine.
1902	Brenizer, R. C.	Loganville,	Sauk.
1867	Brett, Ben C.	Green Bay,	Brown.
1888	Bromley, F. W.	Palmyra,	Jefferson.
1903	Brooks, Floyd D.	Milwaukee,	Milwaukee.
1877	Broughton, R.	Rockford, Ill.	
1902	Brown, Almon L.	Wausau,	Marathon.
1898	Brown, Geo. V. I.	Milwaukee,	Milwaukee.
1902	Brown, John L.	Waupun,	Fond du Lac.
1889	Brown, Horace M.	Milwaukee,	Milwaukee.
1892	Brown, Isaac M.	New London,	Waupaca.
1888	Brown, L. S.	Madison,	Dane.
1897	Brück, C. A. A.	Milwaukee,	Milwaukee.
1902	Bruess, J. W. F.	Milwaukee,	Milwaukee.
1897	Buchan, Samuel C.	Racine,	Racine.
1883	Buckmaster, S. B.	Janesville,	Rock.
1903	Buck, Guerdon C.	Platteville,	Grant.
1901	Bullard, Ernest L.	Mendota,	Dane.
1887	Burgess, A. J.	Milwaukee,	Milwaukee.
1899	Burns, Oramon W.	Winneconne,	Winnebago.
1885	Caldwell, Margaret	Waukesha,	Waukesha.
1902	Callahan, J. L.	La Crosse,	La Crosse.
1888	Campbell, Bernard L.	Monches,	Waukesha.
1901	Campbell, William B.	Menomonee Falls,	Waukesha.
1899	Canavan, James V.	Appleton,	Outagamie.
1894	Canright, Orlo S.	East Troy,	Walworth.
1899	Cantwell, Wm. H.	Shawano,	Shawano.
1899	Capples, Byron Mc.	Waukesha,	Waukesha.
1900	Carpenter, W. T.	Iron Mountain, Mich.	
1902	Casey, Merle	Almond,	Portage.
1902	Cassidy, W. W.	Durand.	Pepin.
1900	Caswell, Harlow O.	Ft. Atkinson,	Jefferson.
1887	Cavaney, J.	Milwaukee,	Milwaukee.
1901	Chambers, Harry P.	Florence,	Florence.
1890	Chandler, Ralphh	Milwaukee,	Milwaukee.
1897	Chapman, Francis M.	Sussex,	Waukesha.
1900	Cheever, Wm. Rockwell	Kenosha,	Kenosha.
1898	Christensen, Christian	La Crosse,	La Crosse.
1898	Christensen, E. S.	Two Rivers,	Manitowoc.
1894	Chrysler, Oscar	National Home,	Milwaukee.
1899	Clark, Burton	Oshkosh,	Winnebago.
1872	Clarke, Almon	Milwaukee,	Milwaukee.
1886	Clason, J. A.	Neosho,	Dodge.

Year of Election.	NAME.	RESIDENCE.	COUNTY.
1900	Coerper, Eugene E.	Milwaukee,	Milwaukee.
1898	Coffey, Chas. James	Milwaukee,	Milwaukee.
1898	Cohn, Arthur H.	Milwaukee,	Milwaukee.
1895	Collier, Lewis B.	Merrill,	Lincoln.
1903	Collins, Charles D.	Milwaukee,	Milwaukee.
1891	Collins, C. B.	Madison,	Dane.
1899	Combs, Clarendon J.	Oshkosh,	Winnebago.
1893	Comfort, A. Ivins	National Home,	Milwaukee.
1895	Conkey, Chas. DeWitt	West Superior,	Douglas.
1898	Conley, John Mayo	Oshkosh,	Winnebago.
1896	Connell, James P.	Fond du Lac,	Fond du Lac.
1899	Connor, H. J.	West Superior,	Douglas.
1903	Conroy, John M.	Neillsville,	Clark.
1903	Conroy, T. Francis	Neillsville,	Clark.
1884	Coon, J. W.	Milwaukee,	Milwaukee.
1888	Copeland, Ernest	Milwaukee,	Milwaukee.
1892	Corbett, J. Fremont	Weyauwega,	Waupaca.
1892	Corbett, M. E.	Oshkosh,	Winnebago.
1901	Corry, Francis M.	Menasha,	Winnebago.
1897	Cossitt, Willet S.	Milwaukee,	Milwaukee.
1900	Couch, Ernest E.	Port Washington,	Ozaukee.
1891	Croose, Theo. P.	Sun Prairie,	Dane.
1902	Cunningham James N.	Stanley,	Chippewa.
1896	Cunningham, M. A.	Janesville,	Rock.
1896	Cunningham, Wilson	Platteville,	Grant.
1899	Cuolahan, Archibald	Merrill,	Lincoln.
1890	Currens, J. R.	Two Rivers,	Manitowoc.
1901	Cutler, John C.	Verona,	Dane.
1892	Cutter, John D.	Tomahawk,	Lincoln.
1887	Dawley, Geo. T.	New London,	Waupaca.
1886	Day, H. L.	Eau Claire,	Eau Claire.
1897	Daniels, Alfred D.	Rhinelander,	Oneida.
1902	Daniels, Lewis J.	Milwaukee,	Milwaukee.
1897	Darby, Henry C.	Wilmot,	Kenosha.
1902	Darling, Abner M.	Crystal Falls, Mich.	
1887	Darling, R. H.	Crystal Falls, Mich.	
1900	Davis, Richard E.	Waukesha,	Waukesha.
1892	Deahofe, S. P.	Mineral Point,	Iowa.
1903	Dearholt, Hoyt E.	Milwaukee,	Milwaukee.
1900	De Besche, Johan A.	Milwaukee,	Milwaukee.
1893	De Chesne, Leon	Sturgeon Bay,	Door.
1903	Decker, Clark O.	Crandon,	Oneida.
1890	De Lap, R. H.	Richland Center,	Richland.
1900	De Swarte, L. J.	Milwaukee,	Milwaukee.
1900	Dewey, Geo. W.	Burnett Junction,	Dodge.
1899	Dewey, Richard	Wauwatosa,	Milwaukee.
1901	Dewire, Milton V.	Sharon,	Walworth.
1900	Dodd, John M.	Ashland,	Ashland.
1873	Dodson, B. F.	Berlin,	Green Lake.
1883	Dodson, J. M.	Chicago, Ill.	
1871	Dodson, N. M.	Berlin,	Green Lake.
1898	Doege, Carl W.	Marshfield,	Wood.
1900	Doyle, Joseph H.	Little Chute,	Outagamie.
1898	Dougherty, Albert A.	Muscoda,	Richland.
1894	Dougherty, Clement F.	Boaz,	Grant.
1903	Dougherty, Frank P.	Butternut,	Ashland.
1903	Drake, Frank I.	Antigo,	Langlade.
1902	Dryer, John W.	Milwaukee,	Milwaukee.
1893	Durr, William	Milwaukee,	Milwaukee.
1888	Earles, W. H.	Milwaukee,	Milwaukee.
1879	Earll, R. W.	Columbus,	Columbia.
1902	Eastman, J. Russell	Kenosha,	Kenosha.

Year of Election.	NAME.	RESIDENCE.	COUNTY.
1903	Eddington, Royal L.	Wauwatosa.	Milwaukee.
1898	Edsall, Frank H.	Madison,	Dane.
1894	Edwards, Adelbert	Reedsburg,	Sauk.
1897	Edwards, John B.	Mauston,	Juneau.
1903	Edwards, Sherman	Oakfield,	Fond du Lac.
1902	Ehlert, E. H.	Hartford,	Washington.
1899	Elkinton, C. H.	Eleva,	Trempealeau.
1899	Ellenson, Eugene P.	Chippewa Falls,	Chippewa.
1897	Elliott, M. Agnes	Racine,	Racine.
1898	Ellis, W. E.	Prentice,	Price.
1895	Ellis, W. H.	Barron,	Barron.
1897	Elmergreen, Ralph	Milwaukee,	Milwaukee.
1890	English, John E.	Baraboo,	Sauk.
1891	Engsberg, Wm. A.	Lake Mills,	Jefferson.
1883	Epley, F. W.	New Richmond,	St. Croix.
1898	Evans, Edward E.	La Crosse,	La Crosse.
1899	Evans, Edward	South Milwaukee,	Milwaukee.
1887	Evans, John M.	Evansville,	Rock.
1894	Everhard, Frank Aaron	Ripon,	Fond du Lac.
1900	Faber, Chas A.	Milwaukee,	Milwaukee.
1899	Fairfield, Wm. E.	Green Bay,	Brown.
1892	Falge, Louis	Reedsville,	Manitowoc.
1898	Farr, Lyman R.	Beloit,	Rock.
1903	Faulds, Robert C.	Abrams,	Oconto.
1896	Feld, Carl R.	Watertown,	Jefferson.
1895	Fenelon, Chas. D.	Phillips,	Price.
1903	Fiedler, Otho N.	Milwaukee,	Milwaukee.
1894	Fish, Edmund F.	Milwaukee,	Milwaukee.
1870	Fisk, M. H.	Wauwatosa,	Milwaukee.
1900	Fitzgerald, J. J.	Eagle,	Waukesha.
1893	Fitzgibbon, Thomas	Milwaukee,	Milwaukee.
1900	Fletcher, E. L.	Eau Claire,	Eau Claire.
1897	Flett, Charles	Waterford,	Racine.
1892	Flower, Dwight	Monticello,	Green.
1903	Foerster, Otto H.	Milwaukee,	Milwaukee.
1893	Ford, J. Frank	Omro,	Winnebago.
1900	Fox, George W.	Milwaukee,	Milwaukee.
1867	Fox, Philip	Madison,	Dane.
1891	Fox, P. R.	Madison,	Dane.
1903	Francis, John H.	Medford,	Taylor.
1881	Frank, Louis F.	Milwaukee,	Milwaukee.
1894	Fraser, Alex. Campbell	Manitowoc,	Manitowoc.
1896	Frederick, H. F.	Friendship,	Adams.
1899	Freeman, Daniel R.	Colby,	Clark.
1883	French, S. W.	Milwaukee,	Milwaukee.
1896	French, Viola M.	Neillsville,	Clark.
1902	Frick, Lewis	Fredonia Station,	Ozaukee.
1894	Friend, Samuel Henry	Milwaukee,	Milwaukee.
1896	Fuchs, Albert F.	Loyal,	Clark.
1900	Fuldner, Louis	Milwaukee,	Milwaukee.
1893	Fuller, Hezekiah D.	Seymour,	Outagamie.
1903	Fulton, Herman	Eau Claire,	Eau Claire.
1902	Fulton, Wm. A.	Burlington,	Racine.
1903	Gapen, Clarke	Madison,	Dane.
1884	Garlock, F. R.	Racine,	Racine.
1895	Gasser, Herman	Platteville,	Grant.
1897	Genter, Arthur E.	Sheboygan,	Sheboygan.
1899	Gibson, Albert D.	Park Falls,	Price.
1898	Gibson, James	Janesville,	Rock.
1902	Gifford, Henry B.	Juda,	Green.
1898	Gilbert, Herman A.	Madison,	Dane.
1899	Gilberson, Peter C.	Mt. Horeb,	Dane.

Year of Election.	NAME.	RESIDENCE.	COUNTY.
1903	Gill, W. W.	Madison,	Dane.
1896	Gillen, Frederick C.	Milwaukee,	Milwaukee.
1887	Godfrey, Jos.	Lancaster,	Grant.
1900	Goette, Wm. L.	Adell,	Sheboygan.
1903	Goodrich, George M.	Clintonville,	Waupaca.
1890	Gordon, W. A.	Northern Hospital,	Winnebago.
1903	Gorst, Charles	Baraboo,	Sauk.
1886	Gould, C. M.	Tucson, Ariz.	
1900	Graenicher, Sigmund	Milwaukee,	Milwaukee.
1898	Graham, Chas. W.	Milwaukee,	Milwaukee.
1901	Gramling, Henry J.	St. Martins,	Milwaukee.
1898	Gratiot, C. C.	Shullsburg,	La Fayette.
1900	Gray, Alfred W.	Milwaukee,	Milwaukee.
1897	Green, Albert	Rockford, Ill.	
1900	Greenberg, Harry	Milwaukee,	Milwaukee.
1900	Gregory, Arthur T.	Elroy,	Juneau.
1899	Gregory, W. W.	Stevens Point,	Portage.
1898	Grosskopf, Ernest C.	Wauwatosa,	Milwaukee.
1895	Ground, Wm. E.	West Superior,	Douglas.
1885	Gudden, B. C.	Oshkosh,	Winnebago.
1897	Gudex, Valentine A.	Milwaukee,	Milwaukee.
1898	Gunderson, Adolf	La Crosse,	La Crosse.
1901	Gunther, Emil	Sheboygan,	Sheboygan.
1897	Gunther, Wm. H.	Sheboygan,	Sheboygan.
1896	Gutsch, Otto J.	Sheboygan,	Sheboygan.
1902	Habhegger, C. J.	Watertown,	Jefferson.
1902	Hackett, James H.	Milwaukee,	Milwaukee.
1902	Hadley, Dudley A.	Oconomowoc,	Waukesha.
1872	Hall, Samuel	Address Unknown.	
1872	Hall, Sidney S.	Ripon,	Fond du Lac.
1886	Hallock, W. E.	Juneau,	Dodge.
1900	Hammond, Wm. R.	Wautoma,	Waukesha.
1895	Hannum, Henry	Bayfield,	Bayfield.
1900	Harbert, Helen A.	Kenosha,	Kenosha.
1903	Hardy, Clarence F.	Milwaukee,	Milwaukee.
1896	Harkness, Grove	Waukesha,	Waukesha.
1899	Harrington, T. L.	Milwaukee,	Milwaukee.
1902	Harper, Cornelius A.	Madison,	Dane.
1893	Harris, Benj. F.	Lac du Flambeau,	Langlade.
1884	Hartford, W. P.	Cassville,	Grant.
1897	Haven, Walter S.	Racine,	Racine.
1889	Hay, Thos. H.	Milwaukee,	Milwaukee.
1889	Hayes, D. J.	Milwaukee,	Milwaukee.
1887	Hayes, E. S.	Eau Claire,	Eau Claire.
1886	Hayman, L. H.	Boscobel,	Grant.
1886	Head, L. R.	Madison,	Dane.
1900	Hebard, Charles H.	Mondovi,	Buffalo.
1900	Hebert, Oliver	Milwaukee,	Milwaukee.
1893	Heidner, Gustav A.	West Bend,	Washington.
1892	Heising, Albert F.	Menomonie,	Dunn.
1896	Helm, Ernest C.	Beloit,	Rock.
1903	Herron, Allen L.	Milwaukee,	Milwaukee.
1896	Hess, Calvin F.	Johnson's Creek,	Jefferson.
1903	Henbest, Geo. M.	Black Creek,	Outagamie.
1903	Henderson, M. LeR.	Milwaukee,	Milwaukee.
1881	Hewitt, M. R.	Milwaukee,	Milwaukee.
1892	Hidershide, Geo. N.	Arcadia,	Trempealeau.
1893	Hill, Warren B.	Milwaukee,	Milwaukee.
1903	Hipke, Gustav A.	Milwaukee,	Milwaukee.
1896	Hipke, William	Hustisford,	Dodge.
1896	Hirth, G. J.	Milwaukee,	Milwaukee.
1893	Hitz, Henry B.	Milwaukee,	Milwaukee.

Year of Election.	NAME.	RESIDENCE.	COUNTY.
1887	Hodgson, A. J.	Waukesha,	Waukesha.
1900	Hoerman, R. B.	Watertown,	Jefferson.
1898	Hoffman, Norman	Milwaukee,	Milwaukee.
1897	Holbrook, Arthur T.	Milwaukee,	Milwaukee.
1898	Hooper, Edgar Steven	Darlington,	La Fayette.
1901	Hopkinson, Daniel	Milwaukee,	Milwaukee.
1899	Hopkinson, Lawrence	Milwaukee,	Milwaukee.
1887	Hosmer, M. S.	Ashland,	Ashland.
1899	Houck, Oscar	La Crosse,	La Crosse.
1891	Hougen, O. T.	Grand Rapids,	Wood.
1890	Howard, Albion Z.	Oshkosh,	Winnebago.
1891	Howard, J. J.	Columbus,	Columbia.
1887	Hoyer, G. C.	Milwaukee,	Milwaukee.
1902	Hubenthal, J. C.	Belmont,	La Fayette.
1893	Huennekens, J. H.	Milwaukee,	Milwaukee.
1884	Hurd, H. H.	Chippewa Falls,	Chippewa.
1891	Hurlburt, F. D.	Reedsburg,	Sauk.
1903	Irvine, Wesley	Royalton,	Waupaca.
1886	Jackson, J. A.	Madison,	Dane.
1902	Jackson, Reginald H.	Madison,	Dane.
1901	Jacob, Benjamin U.	Waukesha,	Waukesha.
1901	Janes, Elma L.	Madison,	Dane.
1901	Jegi, Henry A.	Galesville,	Trempealeau.
1870	Jenkins, G. W.	Kilbourn,	Columbia.
1903	Jenner, Albert G.	Milwaukee,	Milwaukee.
1902	Jermain, Hubert F.	Milwaukee,	Milwaukee.
1897	Jermain, Louis F.	Milwaukee,	Milwaukee.
1902	Jobse, Peter H.	Milwaukee,	Milwaukee.
1890	Jobse, William	Milwaukee,	Milwaukee.
1880	Johnson, S. C.	Hudson,	St. Croix.
1902	Johnson, Hugh B.	Hillsboro,	Monroe.
1902	Jones, Asa N.	Tomah,	Vernon.
1890	Jones, David T.	Wausau,	Marathon.
1903	Jones, Edward H.	Weyauwega,	Waupaca.
1900	Jones, J. F.	Oxford,	Marquette.
1900	Jones, John R.	Randolph,	Dodge.
1893	Jones, Thomas R.	Northern Hospital,	Winnebago.
1899	Judd, Wm. H.	Janesville,	Rock.
1901	Junck, John A.	Sheboygan,	Sheboygan.
1889	Jurgens, L. W.	Fredonia,	Ozaukee.
1893	Kahn, Joseph	Milwaukee,	Milwaukee.
1898	Karsten, Adrian C.	Milwaukee,	Milwaukee.
1894	Kaumheimer, G. J.	Milwaukee,	Milwaukee.
1901	Keenan, George	Madison,	Dane.
1893	Keithley, John W.	Orfordville,	Rock.
1892	Kelley, Edward J.	Milwaukee,	Milwaukee.
1892	Kelley, Julia P.	Milwaukee,	Milwaukee.
1893	Kellogg, E. Wells	Milwaukee,	Milwaukee.
1900	Kelly, Joseph W.	Milwaukee,	Milwaukee.
1898	Kemper, William G.	Manitowoc,	Manitowoc.
1890	Kester, J. W.	Mazomanie,	Dane.
1902	Kinne, Edward	Elkhorn,	Walworth.
1902	Kissling, C. L.	Milwaukee,	Milwaukee.
1899	Kleinhans, Francis A.	Milwaukee,	Milwaukee.
1903	Kleinhaus, M. A.	Milwaukee,	Milwaukee.
1902	Klemm, Louis F.	Milwaukee,	Milwaukee.
1898	Kletzsch, Gustav A.	Milwaukee,	Milwaukee.
1902	Knapp, Leonard L.	New Richmond,	St. Croix.
1892	Kordenat, Carl	Reedsburg,	Sauk.
1900	Kortebein, Henry F.	Milwaukee,	Milwaukee.
1898	Kovats, Edmund	Milwaukee,	Milwaukee.
1896	Kratzsch, A. W.	Milwaukee,	Milwaukee.

Year of Election.	NAME.	RESIDENCE.	COUNTY.
1894	Kratzsch, Richard	Milwaukee,	Milwaukee.
1902	Kriz, Geo. Herbert	Milwaukee,	Milwaukee.
1870	La Count, D.	Wausau,	Marathon.
1898	Ladoff, Anna Menkin	Chicago, Ill.	
1878	Ladd, G. D.	Milwaukee,	Milwaukee.
1883	Langland, P.	Milwaukee,	Milwaukee.
1900	Larson, L. A.	Colfax,	Dunn.
1901	Lasche, Percival G.	Milwaukee,	Milwaukee.
1899	Leith, Robert	Appleton,	Outagamie.
1902	Leland, Abram Mills	Whitewater,	Walworth.
1892	Lemon, Chas. H.	Milwaukee,	Milwaukee.
1901	Leonard, Chas. W.	St. Cloud,	Fond du Lac.
1901	Lerche, Wilhelm	Eau Claire,	Eau Claire.
1903	Lester, Harry S.	Union Grove,	Racine.
1903	Lester, William A.	Onalaska,	La Crosse.
1885	Levings, A. H.	Milwaukee,	Milwaukee.
1900	Lewis, C. H.	Milwaukee,	Milwaukee.
1901	Lewis, James M.	Bloomington,	Grant.
1886	Lewis, L. V.	Sun Prairie,	Dane.
1902	Lewis, Wm. Henry	Eland Junction,	Shawano.
1871	Lindsay, H. E.	Whitewater,	Walworth.
1902	Lockhart, Carl W.	Mellen,	Ashland.
1902	Little, Arthur H.	Milwaukee,	Milwaukee.
1901	Lochemes, Wm. T.	Milwaukee,	Milwaukee.
1898	Lockwood, G. S.	Rome,	Jefferson.
1900	Lohrs, John F.	Highland,	Iowa.
1874	Loomis, E. E.	Janesville,	Rock.
1890	Loope, Geo. L.	Bessemer, Mich.	
1899	Loope, Truman E., Jr.	Iola,	Waupaca.
1899	Loope, Truman E., Sr.	Eureka,	Winnebago.
1902	Loope, Walter A.	Darien,	Walworth.
1899	Looze, John Joseph	Grand Rapids,	Wood.
1901	Love, George S.	Pewaukee,	Waukesha.
1899	Luce, J. E.	Chilton,	Calumet.
1897	Lueck, Geo. W.	Fox Lake,	Dodge.
1899	Luhmann, Fred S.	Manitowoc,	Manitowoc.
1896	Lyman, Francis A.	Madison,	Dane.
1889	Lyman, J. V. R.	Eau Claire,	Eau Claire.
1897	Lyman, Wm. B.	Eau Claire,	Eau Claire.
1896	Lynch, Daniel W.	West Bend,	Washington.
1898	Lynch, John W.	Lawler,	Iowa.
1896	Lyons, James A.	Bear Creek,	Outagamie.
1903	Macdonald, W. H.	Lake Geneva,	Walworth.
1878	Mack, J. A.	Madison,	Dane.
1885	Mackie, William	Milwaukee,	Milwaukee.
1896	MacLachlan, W. G.	McFarland,	Dane.
1898	MacGregor, Samuel A.	Nekoosa,	Wood.
1897	Madden, John	Milwaukee,	Milwaukee.
1903	Madison, James D.	Milwaukee,	Milwaukee.
1901	Maercklein, Bernh'd G.	Milwaukee,	Milwaukee.
1883	Mailer, A. C.	De Pere,	Brown.
1902	Malloy, Thos. Edwin	Random Lake,	Sheboygan.
1899	Malone, Edward W.	Waukesha,	Waukesha.
1894	Malone, Thomas C.	Milwaukee,	Milwaukee.
1893	Malone, W. F.	Milwaukee,	Milwaukee.
1901	Manchester, Burton E.	Armstrong Center,	Forest.
1867	Marks, Solon	Milwaukee,	Milwaukee.
1886	Marquardt, C. H.	La Crosse,	La Crosse.
1903	Marshall, V. F.	Appleton,	Outagamie.
1898	Martin, M. T.	Merrimack,	Sauk.
1896	Martin, O. H.	Kewaunee,	Kewaunee.
1901	Mason, Geo. F.	Milwaukee,	Milwaukee.

Year of Election.	NAME.	RESIDENCE.	COUNTY.
1875	Masterson, J. A.	Watertown,	Jefferson.
1896	Maurer, A. A.	La Crosse,	La Crosse.
1884	McArthur, D. S.	La Crosse,	La Crosse.
1881	McBride, J. H.	Pasadena, Cal.	
1903	McBride, J. S.	Milwaukee,	Milwaukee.
1902	McCabe, Walter F.	Beloit,	Rock.
1896	McCallister, George H.	Davenport, Ia.	
1902	McCarthy, Geo. W.	Milwaukee,	Milwaukee.
1902	McCarthy, Thos. Henry	La Crosse,	La Crosse.
1901	McDowell, A. J.	Soldiers' Grove,	Crawford.
1887	McDill, J. R.	Milwaukee,	Milwaukee.
1895	McGill, Patrick G.	West Superior,	Douglas.
1894	McGovern, John J.	Milwaukee,	Milwaukee.
1897	McGovern, Patrick H.	Milwaukee,	Milwaukee.
1896	McKee, Frank W.	Richland Center,	Richland.
1899	McKenney, George P.	Stockbridge,	Calumet.
1899	McKeon, Philip	New Richmond,	St. Croix.
1883	McLeod, John A.	Milwaukee,	Milwaukee.
1900	McManus, Geo. R.	Stoughton,	Dane.
1899	McManus, Warren C.	Edgerton,	Rock.
1878	McNeel, J. Henry	Fond du Lac,	Fond du Lac.
1898	McShane, B. E.	Milwaukee,	Milwaukee.
1895	McWain, H. A.	Poysippi,	Waushara.
1875	Meachem, J. G.	Racine,	Racine.
1903	Meachem, John G.	Racine,	Racine.
1896	Meacher, Byron C.	Portage,	Columbia.
1893	Mead, S. W.	Plymouth,	Sheboygan.
1893	Mears, G. V.	Fond du Lac,	Fond du Lac.
1898	Meany, John E.	Manitowoc,	Manitowoc.
1896	Meesmann, Hugo	Milwaukee,	Milwaukee.
1897	Messer, Geo. F.	Beaver Dam,	Dodge.
1902	Meyer, Edward	Brillion,	Calumet.
1899	Millard, F. D.	Milwaukee,	Milwaukee.
1874	Miller, Clark J.	Whitewater,	Walworth.
1879	Miller, D. McL.	Oconomowoc,	Waukesha.
1893	Miller, Thomas	Oconomowoc,	Waukesha.
1889	Miller, Wilmot F.	Milwaukee,	Milwaukee.
1889	Mills, James	Janesville,	Rock.
1900	Mills, Norman P.	Appleton,	Outagamie.
1890	Minahan, John R.	Green Bay,	Brown.
1901	Minahan, Robert E.	Green Bay,	Brown.
1901	Mintener, John W.	Trempealeau,	Trempealeau.
1892	Mishoff, Ivan D.	Milwaukee,	Milwaukee.
1898	Moe, Anton J.	Chaseburg,	Vernon.
1900	Moffatt, Henry L.	Poysippi,	Waushara.
1888	Monroe, William B.	Monroe,	Green.
1900	Monroe, Z. W.	Monroe,	Green.
1898	Monsted, John W.	Alderly,	Dodge.
1899	Morgenroth, Henry W.	Berlin,	Green Lake.
1899	Moraux, Felix	Luxemburg,	Kewaunee.
1898	Morley, Frank E.	Viroqua,	Vernon.
1902	Morrison, M.	La Crosse,	La Crosse.
1901	Morse, A. J.	Fond du Lac,	Fond du Lac.
1901	Morse, Edwin A.	Appleton,	Outagamie.
1896	Moyer, Samuel R.	Monroe,	Green.
1903	Mueller, Armin	Milwaukee,	Milwaukee.
1897	Mulholland, John F.	Manitowoc,	Manitowoc.
1885	Munro, Sarah R.	Milwaukee.	Milwaukee.
1903	Murr, John R.	Ironwood, Mich.	
1902	Myers, Albert Wm.	Milwaukee,	Milwaukee.
1903	Nahin, Herman L.	Milwaukee,	Milwaukee.
1888	Neilson, W. H.	Milwaukee,	Milwaukee.

Year of Election.	NAME.	RESIDENCE.	COUNTY.
1893	Nelson, Stella B.	Oshkosh,	Winnebago.
1893	Neyman, Edgar H.	Milwaukee,	Milwaukee.
1901	Nichols, Willard T.	Milwaukee,	Milwaukee.
1898	Nixon, Henry G. B.	Hartland,	Waukesha.
1900	Noble, Joseph B.	Waukesha,	Waukesha.
1894	Nobles, Byron O.	Milwaukee,	Milwaukee.
1891	Noer, Julius	Stoughton,	Dane.
1901	Noer, Peter J.	Menominee, Mich.	
1902	Nolte, Henry	Milwaukee,	Milwaukee.
1890	Nolte, Lewis G.	Milwaukee,	Milwaukee.
1898	Notbohm, Wm. R.	Dousman,	Waukesha.
1896	Nott, G. Wallace	Racine,	Racine.
1900	Noyes, Geo. K.	Milwaukee,	Milwaukee.
1898	Noyes, J. C.	Oshkosh,	Winnebago.
1902	Nutt, Charles R.	Plymouth,	Sheboygan.
1894	Nuzum, Thos. Walter	Brodhead,	Green.
1886	Nye, F. T.	Beloit,	Rock.
1893	O'Brien, Jas. S.	Milwaukee,	Milwaukee.
1899	O'Connor, Donald J.	Escanaba, Mich.	
1901	Oatway, Wm. H.	Lake Mills,	Jefferson.
1899	Oettiker, James	Platteville,	Grant.
1881	Ogden, H. V.	Milwaukee,	Milwaukee.
1899	Oliver, Thos. Jesse	Eden,	Fond du Lac.
1897	Olson, Ever A.	Osseo,	Trempealeau.
1898	O'Malley, Michael	Milwaukee,	Milwaukee.
1897	Orr, E. D.	Mt. Hope,	Grant.
1887	Orvis, E. J.	Oakfield,	Fond du Lac.
1894	Oviatt, Chas. W.	Oshkosh,	Winnebago.
1897	Packard, Charles D.	Rhinelander,	Oneida.
1891	Palmer, W. H.	Janesville,	Rock.
1902	Panetti, Ernst Jacob	Milwaukee,	Milwaukee.
1901	Park, Mabelle M.	Waukesha,	Waukesha.
1896	Parker, Wm. E.	Whitehall,	Trempealeau.
1901	Patridge, Orlando F.	Pewaukee,	Waukesha.
1897	Patek, Arthur J.	Milwaukee,	Milwaukee.
1903	Pearce, W. J.	Dodgeville,	Iowa.
1881	Pelton, L. H.	Waupaca,	Waupaca.
1896	Pember, John F.	Janesville,	Rock.
1896	Perrin, George H.	Wauzeka,	Crawford.
1896	Perrin, H. E.	Star Prairie,	St. Croix.
1903	Peterson, George E.	Waukesha,	Waukesha.
1898	Pfister, Franz	Milwaukee,	Milwaukee.
1902	Pflueger, John H.	Rewey,	Iowa.
1886	Philler, Hugo	Waukesha,	Waukesha.
1903	Phillips, Thomas C.	Milwaukee,	Milwaukee.
1902	Pinkerton, Wm. T.	Mazomanie,	Dane.
1902	Phipps, Franklyn J.	Milwaukee,	Milwaukee.
1896	Pickering, Charles R.	Muscoda,	Grant.
1901	Pomeroy, Emmet H.	Lake Geneva,	Walworth.
1903	Pope, Frank J.	Racine,	Racine.
1896	Poser, Edward M.	Columbus,	Columbus.
1895	Potter, Luther A.	South Superior,	Douglas.
1884	Pratt, H. J.	Montello,	Marquette.
1899	Prince, Lawrence H.	Palmyra,	Jefferson.
1890	Pritchard, J. F.	Manitowoc,	Manitowoc.
1902	Prouty, Wm. A.	Burlington,	Racine.
1884	Puls, A. J.	Milwaukee,	Milwaukee.
1893	Purtell, Edward J.	Milwaukee,	Milwaukee.
1902	Purcell, H. E.	Madison,	Dane.
1902	Purtell, Joseph A.	Milwaukee,	Milwaukee.
1896	Quam, Jacob	Deerfield,	Dane.
1900	Rasmussen, H.	Milwaukee,	Milwaukee.

Year of Election.	NAME.	RESIDENCE.	COUNTY.
1896	Ravn, Michael	Merrill,	Lincoln.
1903	Reed, Flora A.	Fond du Lac,	Fond du Lac.
1892	Reeve, James S.	Appleton,	Outagamie.
1867	Reeve, J. T.	Appleton,	Outagamie.
1894	Redelings, Theo. J.	Marinette,	Marinette.
1898	Regan, Eugene D.	Milwaukee,	Milwaukee.
1901	Reich, Hugo C.	Sheboygan,	Sheboygan.
1902	Reich, William F.	Milwaukee,	Milwaukee.
1899	Reineking, John	Hortonville,	Outagamie.
1883	Reineking, Herman	Milwaukee,	Milwaukee.
1899	Reinhard, C.	Milwaukee,	Milwaukee.
1903	Remaly, Charles E.	Melrose,	Jackson.
1901	Reynolds, Nelson W.	Lone Rock,	Richland.
1877	Reynolds, J. C.	Lake Geneva,	Walworth.
1902	Rheingans, George H.	South Germantown,	Washington.
1902	Rice, John A.	Merton,	Waukesha.
1881	Richards, J. B.	Brodhead,	Green.
1903	Rigby, Edward D.	Milwaukee,	Milwaukee.
1890	Riley, Chas. P.	Baraboo,	Sauk.
1898	Rinehart, W. T.	Ashland,	Ashland.
1898	Roberts, Geo. W.	Albany,	Green.
1893	Robinson, Byron	Chicago, Ill., 100 State.	
1902	Rock, John N.	Milwaukee,	Milwaukee.
1896	Rockwell, J. W.	Grand Rapids,	Wood.
1893	Rogers, Frederick C.	Milwaukee,	Milwaukee.
1903	Rogers, Philip F.	Milwaukee,	Milwaukee.
1900	Rohrdanz, Robert W.	Milwaukee,	Milwaukee.
1890	Rood, C. A.	Reedsburg,	Sauk.
1886	Rood, Galen	Stevens Point,	Portage.
1898	Rood, John F.	Darien,	Walworth.
1890	Roos, Adolph	Oshkosh,	Winnebago.
1903	Rosenberry, A. B.	Arbor Vitae,	Vilas.
1900	Rosenberry, Harvey L.	Wausau,	Marathon.
1901	Ryan, Edward E.	Milwaukee,	Milwaukee.
1903	Salinco, Stephen S.	Milwaukee,	Milwaukee.
1903	Sanborn, Manley J.	Appleton,	Outagamie.
1898	Sanborn, Marcus E.	Eagle River,	Vilas.
1886	Sarles, W. T.	Sparta,	Monroe.
1900	Sartell, E. N.	Milladore,	Wood.
1886	Sauerhering, D. L.	Wausau,	Marathon.
1895	Saunders, George	West Superior,	Douglas.
1894	Sauer, F. N.	Milwaukee,	Milwaukee.
1898	Sawbridge, Edwin	Stephenson, Mich.	
1889	Sayle, R. G.	Milwaukee,	Milwaukee.
1896	Schallern, Ottmar	Ripon,	Fond du Lac.
1896	Schaper, Herman	Kiel,	Manitowoc.
1899	Schauer, Julius L.	Milwaukee,	Milwaukee.
1890	Schiller, Leopold	Milwaukee,	Milwaukee.
1900	Schlaeger, Hugo H.	Milwaukee,	Milwaukee.
1902	Schmeling, A. F.	Columbus,	Columbia.
1883	Schmidt, Philip	Milwaukee,	Milwaukee.
1900	Schmitz, W. C.	St. Nazianz,	Manitowoc.
1903	Schneider, Adelbert	Milwaukee,	Milwaukee.
1883	Schneider, Joseph	Milwaukee,	Milwaukee.
1890	Schoen, A. F.	Mayville,	Dodge.
1886	Schreiner, J. K.	Westby,	Vernon.
1897	Schnetz, Thomas N.	Caledonia,	Racine.
1898	Schulz, F. M.	Milwaukee,	Milwaukee.
1903	Schuster, Bruno L.	Milwaukee,	Milwaukee.
1901	Schwalbach, C. G.	Juneau,	Dodge.
1894	Scollard, John T.	Milwaukee,	Milwaukee.
1883	Scollard, W. E.	Milwaukee,	Milwaukee.
1902	Scott, Wm. F.	Port Washington,	Ozaukee.

Year of Election.	NAME.	RESIDENCE.	COUNTY.
1893	Seaman, Gilbert E.	Milwaukee,	Milwaukee.
1890	Sears, Harry B.	Beaver Dam,	Dodge.
1896	Sharp, Mila B.	Madison,	Dane.
1902	Shaw, Byron Wm.	Waunakee,	Dane.
1900	Shearer, Robert D.	Milwaukee,	Milwaukee.
1899	Shelden, Walter DeWitt	Reedsburg,	Sauk.
1885	Sheldon, C. S.	Madison,	Dane.
1900	Sheldon, Walter H.	Madison,	Dane.
1899	Sherman, Adin	Winnebago,	Winnebago.
1887	Shimonek, F.	Milwaukee,	Milwaukee.
1900	Shinnick, Thos. F.	Watertown,	Jefferson.
1893	Sholdski, Joseph	Milwaukee,	Milwaukee.
1900	Sickles, Wm. A.	Milwaukee,	Milwaukee.
1903	Sickhart, Jasper W.	Delavan,	Walworth.
1899	Sidler, Arthur C.	Cudahy,	Milwaukee.
1892	Sifton, Harry A.	Milwaukee,	Milwaukee.
1900	Sleicher, James M.	Watertown,	Jefferson.
1896	Smith, Bryant	Milwaukee,	Milwaukee.
1869	Smith, Chas. M.	Evansville,	Rock.
1895	Smith, Chas. S.	Elroy,	Juneau.
1901	Smith, Geo. Lewis	Jefferson,	Jefferson.
1903	Smith, Sidney S.	Milwaukee,	Milwaukee.
1899	Smith, Wallace Perry	Waupun,	Fond du Lac.
1902	Sommers, Julius C.	Madison,	Dane.
1894	Sorenson, Soren	Racine,	Racine.
1891	Sorenson, J. S.	Shiocton,	Outagamie.
1892	Specht, John	West Superior,	Douglas.
1899	Spencer, Leonard E.	Wausau,	Marathon.
1892	Sperry, Selden B.	Milwaukee,	Milwaukee.
1897	Sperry, Willis P.	Phillips,	Price.
1903	Spitz, Milton M.	Milwaukee,	Milwaukee.
1893	Stack, Stephen S.	Milwaukee,	Milwaukee.
1883	Stalker, H. J.	Kenosha,	Kenosha.
1900	Stanley, Wm. S.	National Home,	Milwaukee.
1874	Steele, Geo. M.	Oshkosh,	Winnebago.
1903	Steenberg, Hubert S.	Milwaukee,	Milwaukee.
1897	Steffen, I. D.	Antigo,	Langlade.
1896	Stephenson, Wm. L.	Ladysmith,	Chippewa.
1900	Stevens, Frank E.	Bristol,	Milwaukee.
1898	Stoddard, Chas. H.	Milwaukee,	Milwaukee.
1899	Stoelting, C. W.	Oconto,	Oconto.
1900	Strauss, F. H.	Milwaukee,	Milwaukee.
1902	Strong, R. J. C.	Arlington,	Columbia.
1903	Soby, J. J.	Deerfield,	Dane.
1898	Suiter, F. C.	La Crosse,	La Crosse.
1902	Sykes, Herbert D.	Milwaukee,	Milwaukee.
1890	Sweemer, William	Milwaukee,	Milwaukee.
1888	Tanner, Herbert B.	Kaukauna,	Outagamie.
1901	Tasche, Conrad T.	Howard,	Sheboygan.
1902	Tasche, John C.	Sheboygan,	Sheboygan.
1902	Taugher, A. J.	Milwaukee,	Milwaukee.
1900	Taugher, James P.	Milwaukee,	Milwaukee.
1900	Teschan, Rudolph C.	Milwaukee,	Milwaukee.
1900	Teschan, Rudolph F.	Milwaukee,	Milwaukee.
1898	Thayer, C. E.	Markesan,	Green Lake.
1900	Thienhaus, Karl O.	Milwaukee,	Milwaukee.
1902	Thill, Dominic P.	Milwaukee,	Milwaukee.
1902	Thompson, R. E.	Milwaukee,	Milwaukee.
1901	Thomson, Bertha V.	Oshkosh,	Winnebago.
1903	Thomson, Wm. J.	Briggsville,	Marquette.
1898	Thorndike, Wm.	Milwaukee,	Milwaukee.
1897	Thorne, James P.	Janesville,	Rock.

Year of Election.	NAME.	RESIDENCE.	COUNTY.
1892	Tibbits, Newton I.	Peshtigo,	Marinette.
1898	Tibbitts, Ulysses J.	Prospect,	Waukesha.
1903	Tisdale, Lewis C.	Milwaukee,	Milwaukee.
1903	Todd, Samuel G.	Neenah,	Winnebago.
1900	Tolman, E. E.	Address unknown.	
1901	Tomelty, Thomas	Big Bend,	Waukesha.
1890	Tower, F. J.	Milwaukee,	Milwaukee.
1883	Townsend, E. H.	New Lisbon,	Juneau.
1903	Treat, Charles R.	Sharon,	Walworth.
1898	Trowbridge, Chas. H.	Viroqua,	Vernon.
1886	Trowbridge, J. B.	Hayward,	Sawyer.
1897	Tyrrell, Clara F.	Fox Lake,	Dodge.
1896	Urquhart, John H.	Iron Belt,	Iron.
1897	Valentine, L. P. A.	Somers,	Kenosha.
1899	Van Altena, Louis A.	Cedar Grove,	Sheboygan.
1890	Vincent, G. R.	Tomah,	Monroe.
1893	Voje, J. H.	Oconomowoc,	Waukesha.
1892	Von Neupert, Carl, Jr.	Stevens Point,	Portage.
1897	Von Neupert, Carl, Sr.,	Stevens Point,	Portage.
1894	Voorus, Clark Wesley	Beaver Dam,	Dodge.
1901	Wadey, Bert J.	Belleville,	Dane.
1902	Wakefield, P. A.	West Salem,	La Crosse.
1883	Walbridge, F. E.	Milwaukee,	Milwaukee.
1878	Walbridge, J. S.	Berlin,	Green Lake.
1902	Waldschmidt, Jacob	St. Cloud,	Fond du Lac.
1898	Wallis, Jos. H.	Milwaukee,	Milwaukee.
1892	Wall, Herman J.	Richland Center,	Richland.
1893	Walsh, Chas. Chase	Merrill,	Lincoln.
1893	Walsh, Thos. G.	Milwaukee,	Milwaukee.
1901	Ward, John Peter	Waukesha,	Waukesha.
1888	Washburn, William H.	Milwaukee,	Milwaukee.
1891	Washburn, S. M. W.	Minneapolis, Minn.	
1903	Watson, Fred V.	Antigo,	Langlade.
1903	Weber, Fred R.	Milwaukee,	Milwaukee.
1893	Wegge, William F.	Milwaukee,	Milwaukee.
1898	Werner, O. Edward	Rib Lake,	Taylor.
1894	White, Adam G.	Milwaukee,	Milwaukee.
1890	White, Moses I.	Wauwatosa,	Milwaukee.
1897	White, Wm. E.	Lyons,	Walworth.
1897	Whyte, Wm. F.	Watertown,	Jefferson.
1886	Wiley, Frank S.	Fond du Lac,	Fond du Lac.
1899	Wilkinson, Michael R.	Oconomowoc,	Waukesha.
1898	Willard, L. Mortimer	Wausau,	Marathon.
1897	Willson, Charles G.	Milwaukee,	Milwaukee.
1903	Williams, Alexander J.	Racine,	Racine.
1903	Williams, H. H.	Sparta,	Monroe.
1896	Williams, Theodore F.	Chelsea,	Taylor.
1880	Williams, William E.	Cambria,	Columbia.
1899	Williamson, Geo. H.	Mattoon,	Shawano.
1888	Williamson, J. L.	Milwaukee,	Milwaukee.
1898	Willis, Sidney S.	Appleton,	Outagamie.
1897	Windesheim, Gustave	Kenosha,	Kenosha.
1888	Wingate, U. O. B.	Milwaukee,	Milwaukee.
1900	Winneman, Frank A.	Hazelhurst,	Oneida.
1900	Winter, E. H.	Augusta,	Eau Claire.
1900	Witte, W. C. F.	Milwaukee,	Milwaukee.
1885	Wolcott, Laura J. R.	Milwaukee,	Milwaukee.
1902	Wolff, Jacob	Milwaukee,	Milwaukee.
1891	Woods, E. F.	Janesville,	Rock.
1898	Wray, Wm. E.	Denmark.	Brown.
1899	Wright, Geo. M.	Winneconne,	Winnebago.
1890	Wurdemannn, H. V.	Milwaukee,	Milwaukee.

Year of Election.	NAME.	RESIDENCE.	COUNTY.
1899	Wyatt, D. B.	Fond du Lac,	Fond du Lac.
1900	Wylie, D. B.	Milwaukee,	Milwaukee.
1890	Youmans, L. E.	Mukwonago,	Waukesha.
1900	Zeiss, Anton	Sheboygan,	Sheboygan.
1889	Zeit, F. Robert	Chicago, 4016 Vincennes Av.	
1890	Zimmermann, Charles	Milwaukee,	Milwaukee.
1878	Zinns, A. J.	Milwaukee,	Milwaukee.
1900	Zochert, L. W.	Hingham,	Sheboygan.
1903	Zoehrlaut, Geo. G.	Milwaukee,	Milwaukee.

HONORARY MEMBERS.

Year of Election.	Name and Residence.	Year of Election.	Name and Residence.
1869	*Barlett, J. K., Berkeley, Cal.	1895	Ohage, Justus, St. Paul, Minn.
1869	*Davies, J. E., Madison.	1872	*Raymond, D. A., Fond du Lac.
1873	*Davies, M. M., Baraboo.	1896	Reynolds, B. O., Lake Geneva.
1870	*Gorman, W. M., Milwaukee.	1867	Russell, T. P., Oshkosh.
1874	Graettinger, Alois, Ontario, Cal.	1870	Senn, N., Chicago, Ill.
1871	*Griffin, E. L., Fond du Lac.	——	Stone, A. J., St. Paul, Minn.
1868	Hall, Storrs, Ripon.	1867	Whiting, J. B., Janesville.
1883	Hogeboom, C. E., Eau Claire.	1848	*Wilber, G. D., Denver, Colo.
1874	Monroe, Wm., Monroe.	1870	Witter, G. F., California.

*Deceased.

CURRENT LITERATURE.

MEDICINE.

W. H. Washburn, M.D., Jos. Kahn, M.D., L. F. Jermain, M.D., A. W. Myers, M.D.

On the Use of the Roentgen Rays in the Diagnosis of Pulmonary Disease.—J. F. HALLS DALLY (*Lancet*, June 27, 1903) contributes to the literature of this subject an interesting paper in which he discusses the relative usefulness of the fluorescent screen and the radiograph, and finds that each serves a useful purpose. Radioscopy is preferable in hospital work where a considerable number of patients are to be examined in a short time. Radiography in private work has the advantage of enabling one to preserve a record of the case for future reference.

An interesting study of the excursions of the diaphragm is presented, the facts indicating that unilateral limitation of diaphragmatic movement is a very early phenomenon in pulmonary tuberculosis, often appearing before any other evidence of tuberculosis exists. It has been surmised that this may possibly be due to an unrecognized pleurisy which has left slight traces in the form of adhesions, but Dally thinks it more reasonable to suppose that it may be due to a modification in some way of the inherent elasticity of the lung owing to the influence of the tubercle bacilli within it.

Summarizing, he says that though it might appear at first sight that the Roentgen rays presented a royal road to the art of diagnosis and that it is now no longer necessary to undergo much clinical labor in order to

acquire manipulative and auscultatory skill, this view is entirely superficial and unwarranted, and that radioscopy only enhances the value of the older methods by presenting to the eye intrathoracic morbid appearances.

As with other methods of investigation, it is to be said that the Roentgen rays are not infallible. The greater the experience of the physician the more accurate will be his results both with radioscopy and with the older methods of auscultation and percussion. In this respect Dally says, "A good radiograph in some respects may be said to resemble a painting by Turner. Without intuition or previous study the one is almost as incomprehensible as the other, but as we gaze the wealth of detail rises before our vision until finally we are able to interpret the meaning of streaks and shadows that to the untrained eye are meaningless." He concludes as follows:

1. That the Roentgen rays form an important adjunct to the methods of physical investigation previously in use.

2. That unilateral limitation of diaphragmatic movements, as seen by means of the fluoroscope, is often the earliest indication of commencing pulmonary tuberculosis.

3. That by the aid of the Roentgen rays pulmonary tuberculosis can be diagnosed at an earlier stage than by any other means at our disposal.

(W. H. W.)

Red-Light Treatment of Smallpox.—PROF. N. R. FINSEN, of Copenhagen (*Brit. Med. Jour.*, June 6, 1903) states that during the ten years which have elapsed since he first advocated the use of red light in the treatment of smallpox, an idea suggested to him by some old American and English reports, this treatment has been tried in many places with unquestionable success. He considers it definitely proved that daylight and especially the chemical rays have a most injurious effect on the course of smallpox, as the suppuration of the vesicles is due to the effect of light, and that, accordingly, it is possible to avoid suppuration and its consequences by protecting the patient from the action of light. On the other hand, light seems to have no action on the smalllpox infection itself, and death caused by the latter cannot be prevented by excluding the chemical rays. But even the avoidance of suppuration is of the greatest importance as this is the cause of the greatest number of deaths and to this process are due most of the complications and sequelæ as well as the disfiguring pitting. (A. W. M.)

The Etiology of Serofibrinous Pleurisy with Reference to Cytological Diagnosis.—BUNTING (*Johns Hopkins Hospital Bulletin*, July, 1903) reviews the literature and reports his observations, based on the study of twenty-eight cases in the service of Dr. Osler at Johns Hopkins Hospital. There have been many conflicting opinions regarding the etiology of so-called idiopathic pleurisy. Landouzy believes that 98 per cent. of all cases of serofibrinous pleurisy are of tubercular origin, while Prudden states that "results seem to justify belief in the comparatively frequent occurrence of simple exudative pleurisy with serofibrinous exudate which is not tuberculous and not demonstrably associated with bacteria of any kind."

Widal and Ravaut in 1900 and Wolf in 1901 published the results of their work based upon the cellular contents of the exudate. Widal and Ravaut found polymorphonuclear cells in large numbers with a few small mononuclears and a few endothelial cells in the septic cases and red blood cells in those due to the pneumococcus.

They studied fifty-six cases of idiopathic pleurisy, the effusion being aspirated about the ninth day, and in all, the white cells consisted almost exclusively of small mononuclear cells, a few large endothelial cells and only rarely a polymorphonuclear cell except in two cases in which they were present in the proportion of one to nine small mononuclears. In the mechanical pleurisies they found fewer cells than in the other two groups. The endothelial cell is characteristic of this variety especially when found in placards of two, three or more cells without visible cell outline.

Wolf's results agree in the main points with those of Widal and Ravaut. In addition he found that earlier in the idiopathic cases the exudate contains polymorphonuclear cells almost exclusively, but that the small mononuclears become evident in a few days and gradually increase until they entirely take the place of the polymorphonuclears. He considers the cellular method of diagnosis more exact than the cultural and that an exudate of one-half or more of mononuclear cells speaks for the tuberculous nature of the process. These observations have been repeatedly confirmed by others and have led to the cytological doctrine that the small mononuclear leucocyte is the surest index to tuberculosis.

Bunting finds as a result of his own observations that the idiopathic cases have an exudate remarkably uniform in cellular content and general characters which may be assumed to indicate a uniformity in the nature and etiology of the process. The work of others seems to indicate that this uniform cellular formula proves the presence of a tubercular process.

A possible predisposing factor in these cases would seem to be indicated by the condition of the blood. The red blood count was uniformly high, often quite a little above normal, while the hemoglobin determination was in the neighborhood of seventy per cent.

One of the cases came to autopsy. A colored man had a left-sided pleurisy with effusion in 1900 and a right-sided effusion in the fall of 1901 without intrapulmonary signs and without tubercle bacilli being demonstrable in the sputum. At the post-mortem in November, 1902, almost complete obliteration of both pleural cavities was found and also a marked tuberculous involvement of the lungs. (J. K.)

Prognosis and Curability of Epilepsy.— TURNER (*Lancet*, June 13, 1903) from a study of 366 cases of genuine idiopathic epilepsy under constant observation and treatment for a period of at least two years, concludes that a family history of epilepsy will be found most frequently amongst those who have become confirmed epileptics; but such a history does not militate against the prospects of arrest or improvement of the disease in any given case. The age at the onset of the disease has an especial bearing upon the prognosis. Epilepsy commencing under ten years of age, is least favorable as regards arrest or improvement and is most apt to go on to the production of confirmed cases; while those cases in which the onset is be-

tween 16 and 20 years of age, show the greatest percentage of arrests and the lowest percentage of confirmed cases. From this point onwards up to 35 years there is a steady diminution in the percentage of arrests and a progressive increase in the percentage of confirmed cases. The figures confirm in a striking manner the opinion of Hippocrates who wrote: "Epilepsy which commences about puberty is susceptible to cure, while that which comes on after 25 years of age as a rule only terminates with the patient."

The duration of the malady influences the prognosis to the extent that arrest or improvement is much more likely during the first five, than after the second five years. Cases, however, may be arrested even after a duration of 20 to 30 years.

The longer the intervals between the attacks the better will be the prognosis and the major seizures are more tractable than the minor ones.

Marriage and pregnancy seem to have little influence on the attacks, but the puerperium and the period of lactation are especially favorable for recurrence of fits.

Long remissions, induced either by successful treatment or from spontaneous cessation of the fits, sometimes lasting for several years are not unusual in epilepsy; they are of favorable prognostic value but are not synonymous with a cure of the disease. From the collected statistics, a period of remission for nine years has been fixed as the basis upon which a cure of epilepsy may be established. With this definition of a cure he regards 10 per cent. of epileptics as curable. In the cases in which arrest took place cessation of the fits occurred within the first year of continuous treatment in over 50 per cent. (A. W. M.)

SURGERY.

F. E. Walbridge, M.D., H. A. Sifton, M.D., F. Shimonek, M.D.

Operative Treatment of Graves Disease.—T. C. WITHERSPOON (*Jour. Am. Med. Assoc.*, July 25, 1903) gives his experience with this disease. He relates the histories of nine cases operated upon by partial thyroidectomy, and by the Jonesco procedure, i. e., resection of the sympathetic ganglia. Those of the first group were all very greatly benefited, if not entirely cured. All of these had marked thyroid enlargement.

Case 3 was subjected to the Jonesco operation. This patient died several weeks after the operation, during which time she was greatly improved. Her death was attributed probably to chronic nephritis.

The operation of partial thyroidectomy would seem to be very reasonable in cases of thyroid enlargement which in all probability lead to hyperthyroidization, the exciting cause of Graves disease, but when the subjective manifestations were present without thyroid hypertrophy the cause of the disturbance must be sought elsewhere than the thyroid. Graves disease has been reported existing in patients whose thyroids had been removed.

The source of Graves disease must be laid at the proper door before the nature of the operation is decided upon. (F. S.)

Humeroacromical Suture for Habitual Dislocation of Shoulder.—DR. CARL BECK (*N. Y. Med. Journal and Phil. Med. Journal*, July 11, 1903) reports a case of habitual dislocation of the shoulder in which repeated dislocations had occurred during the previous two years. An incision made between the deltoid and pectoralis major muscles revealed the fact that there had been no rupture of the supraspinatus or the infraspinatus muscles or the capsule. The capsule was found so much relaxed that a fold could be taken up and contracted by carrying a purse string suture through it He then drilled holes through the head of the humerus and acromian. Through these holes a medium silver wire was carried, by which procedure adhesive inflammation was expected to hold the head in place. Six months later the result seems to be perfect. (F. E. W.)

On the Fatal Effects of Chloroform on Children Suffering from a Peculiar Condition of Fatty Liver.—GUTHRIE (*Lancet*, July 4, 1903) first gives a resumé of a paper on "Some Fatal After-effects of Chloroform on Children," written by him in 1894. In this paper he cited nine cases of death from chloroform together with the symptoms and post-mortem findings. From these he drew the following conclusions: 1. That death in all but one case was due to auto-intoxication; 2, that a fatty condition of the liver existed before the operation; 3, that chloroform and operation shock combined aggravated the condition already present (fatty liver) and thus loaded the system with toxic alkaloids which the kidneys were unable to eliminate. These conclusions did not meet with acceptance and it was held that death had been due to fat embolism or carbolic acid poisoning—in all of above cases carbolic acid was used either as a dressing or to purify the skin. In this paper the author gives further proof for his former conclusions and cites cases which meet the following requirements: 1, That the child should be apparently healthy; 2, the operation a trivial one; 3, chloroform used as an anesthetic; 4, all possibility of carbolic acid poisoning excluded; 5, the characteristic fatty liver found after death; 6, microscopical examination made of the lungs and brain and so disprove fat embolism as the cause of death. The author goes on to show that the condition of fatty liver was pre-existent at the time of operation under chloroform and that the chloroform only takes the rôle of "the last straw" in the matter. Prolonged narcosis by chloroform results in general fatty degeneration but in the author's most typical cases inhalation only lasted from 15 to 20 minutes—too short a time to cause any fatty change.

Under prophylaxis the author says that the history of symptoms in the patient might give rise to a suspicion of a morbidly fatty liver, such as a history of so-called "bilious attacks." And if such a suspicion be present ether should be used. The diagnosis is not difficult because of the peculiar cerebral symptoms. The treatment consists of active purgation, venesection, and saline transfusion. (H. A. S.)

Overlapping Operation for the Radical Cure of Umbilical Hernia.—W. J. MAYO (*Journ. Am. Med. Assoc.*, July 25, 1903) gives further experience in the treatment of umbilical hernia. He has operated thirty-five times by the overlapping method; ten times, the side to side method was used, and twenty-five times the overlapping was done from above downwards. The

results have been most gratifying. There were no deaths. In one case of side to side overlapping, there was a partial relapse, there being a boat-shaped stretching. In no case where the overlapping was done from above downward has he been able to trace a relapse. He has found the overlapping from above downward so much easier, that he now employs it exclusively. He gives the different steps of the operation as follows:

1. Transverse elliptical incisions are made surrounding the umbilicus and hernia; this is deepened to the base of the hernial protrusion.

2. The surfaces of the aponeurotic structures are carefully cleared two and one-half to three inches in all directions from the neck of the sac.

3. The fibrous and peritoneal coverings of the hernia are divided in a circular manner at the neck, exposing its contents. If intestinal viscera are present the adhesions are separated and restitution made. The contained omentum is ligated and removed with the entire sac of the hernia and without tedious dissection of the adherent portion of omenta.

4. An incision is made through the aponeurotic and peritoneal structures of the ring extending one inch or less transversely to each side, and the peritoneum is separated from the under surface of the upper flap.

5. Beginning from two to two and one-half inches above the margin of the upper flap, three to four mattress sutures of silk or other permanent material are introduced, the loop firmly grasping the upper margin of the lower flap; sufficient traction is made on these sutures to enable peritoneal approximation with running suture of catgut. The mattress sutures are then drawn into position, sliding the entire lower flap into the pocket previously formed between the aponeurosis and the peritoneum above.

6. The free margin of the upper flap is fixed by catgut sutures to the surface of the aponeurosis below, and the superficial incision closed in the usual manner. In the larger hernias the incision through the fibrous coverings of the sac may be made somewhat above the base, thereby increasing the amount of tissue to be used in the overlapping process. (F. E. W.)

ORTHOPEDICS.

Geo. P. Barth, M.D., H. E. Dearholt, M.D.

The Education of Physically Defective Children.— F. M. D. BERRY (*Lancet*, July 4, 1903) describes London's special schools for crippled children who cannot attend the common schools on account of deformity or physical incapacity to cope with normal children. Tuberculosis, paralysis, rickets, and epilepsy form the most common diseases. Admission to the school is obtained after examination by a medical board. A trained nurse is in attendance at each center. A warm dinner is furnished at a small cost. Ambulances are used where necessary to take the children to and from school, while especially designed chairs and cots are provided to meet the requirements of individual cases.

He admits that the system is expensive, but believes that, while many die before reaching adult life, the schools aid many to, at least partially, earn their own living. Many are taught to walk and to become otherwise stronger by physical training. (H. E. D.)

Epiphyseolysis with Subcutaneous Periosteotomy in the Treatment of Genu Valgum Infantum.—MAX REINER (*Deutsch. med. Wochenschrift*, July 2, 1903) makes a strong plea in favor of this procedure, adducing proofs and statements to support the view that no hindrance to growth is produced by a solution of continuity at the diapho-epiphyseal junction.

In patients over 17 years of age he prefers circumferential osteotomy. Heretofore, in patients under 7 other operative procedures were preferred for reasons which he gives.

In rachitic children, the periostium is very much thickened over the diaphysis of the femur and is closely adherent to its end. Experiments by himself and others proved to him that the periostium of children prevented separation of the epiphysis far more persistently than in adolescents. Proceeding from this result in children under 7, Reiner divides the periostium subcutaneously on the lateral side by means of a specially devised knife using the epicondyle of the femur as a guide and then proceeds to the separation of the epiphysis which, he finds, occurs easily thereafter.

His after-treatment is that generally employed in such cases.

(G. P. B.)

On Congenital Hip Dislocation.—HEUSNER (*Ztschr. f. orthopäd. Chir.*, X, 4, 1902) assumes that, like club-foot, hipdislocation can be caused by the leg being hung in an amniotic fold in the 6-8th week of embryonal life.

He refers bloody reposition to Poggi, bloodless to Pravaz and Paci.

He reviews the results obtained by operation very critically and finds that in but 5 per cent. are good anatomical results obtained.

He is a follower of the bloodless method but recommends Schede's osteotomy of the femur to correct the pathological anteversion of the neck. In children of the age of 2 years he uses extension apparatus with good results.

(G. P. B.)

Clinical Observations of Backache.—ROBT. W. LOVETT (*New York Medical Journal*, May 30, 1903) divides the causes of backache into two great classes: (1) Those due to causes existing in the spine itself, and (2) those due to causes existing outside of the spine, as in the feet.

Faulty attitude in standing often gives rise to the condition known as irritable or neurasthenic spine. Treatment should be tonic with gymnastics. Lateral curvatures are accountable for this symptom. He recognizes the possibility of a condition which might be termed "chronic sprain." Immobilization with a plaster jacket should be used. The pain of Pott's disease is more frequently referred to the terminations of the spinal nerves and to the chest. Arthritis deformans is accompanied by deformity and stiffness.

As to the conditions of the feet, they may be flat or pronated. A condition of which little has been said, is contracted foot, in which the arch may be higher than normal, with a shortening of the calf muscles. The patient has difficulty in dorsi-flexing the foot and there is likelihood of there being an anterior meta-tarsalgia. Pain is referred to the lumbar region of the back. Stretching of the shortened muscles, with support to the arch, usually gives prompt relief. (H. E. D.)

THE WISCONSIN
MEDICAL JOURNAL

SEPTEMBER, 1903

A NOTE ON THE RELATION OF NEURALGIA TO ALTITUDE, WITH REPORT OF TWO CASES.*

BY F. SAVARY PEARCE, M. D.
Professor of Nervous and Mental Diseases in the Medico-Chirurgical College,
PHILADELPHIA, PA.

This subject, though most liable to contrary opinion by men of equal merit, and located in various parts of the United States, has a deep interest and there is certainly a very definite *relation* between pain storms and altitude though difficult to positively work out. Barometric pressure must be the main factor influencing pain of so-called functional disease as well as it is a modifying element in pain due to organic disease, as for example in the root pain of ataxics.

This short contribution is made in order to record two cases: one of hystero-neurasthenia, and the other of neurasthenic-hypochondria; both patients suffering from intense facial neuralgia yet not so persistent nor associated with spasm as to warrant a diagnosis of tic douloureux in either case. Also, the subsequent history of both cases proves it to have been a curable symptom complex.

Case I.—M. R., a hysterical girl, aet. 18, has been suffering from intense facial neuralgia of the inferior branch of the fifth nerve for three years. The damp country up the Schuylkill valley where she had always lived, was a menace to the curing of the real pain which she had in the face, although she was a neurotic—it must be said. After

*Read before the American Climatological Association, Washington, D. C., May 12, 1903.

trying all the analgesic remedies with caution to the full limit, I made up my mind that change of altitude and to a dryer and warmer climate during the winter months would be *the* remedial measure best to institute, and the patient was willing for any experimental measure in therapeutics.

Accordingly we sent the young lady to Tryon, N. C., in the "thermal belt," at an altitude of 1,050 feet, the pain bettering from the day of her arrival in the South where she did very well. The balmy atmosphere which is 10 degrees warmer than that in the vicinity of Ashville, much helped her pain as stated. When she went to 2,500 feet above sea level at Hendersonville, she immediately became distinctly worse as to the neuralgia. This excludes psychic effect in the case, I believe. The young woman has been delighted with her relief from suffering, which was a cure indeed in one month after she left me in Philadelphia. A recent letter is confirmatory of her being very well now six months since she left Pennsylvania.

Case II.—Dr. S. L. W., aet. 60, was referred to me by Professor L. Webster Fox, who had found nothing in the eyes to account for headache of neuralgic type, involving the supra-orbital branch on either side. This man had gotten into a miserable neurasthenic hypochondriacal state—the result of overwork and worry associated with the distress of a most persistent diurnal paroxysmal pain which at times amounted to acute agony. Doctor-like, he had used most of the remedies in the pharmacopœia on his own account. The first suggestion from me was to drop all medication so we could see where we stood in the matter, although—it must be stated—the physician was not taking medicine at the time he first came for treatment in January, 1903, the pain the while persisting as indicated above. This, with the general neurasthenic condition of the man and the nature of the suffering, made for a diagnosis of supra-orbital neuralgia. I tried the mono-bromate of camphor in three grain doses every three hours when the paroxysm returned, with some betterment during the first few weeks of his visits. During this time, the general therapeutic measure was towards the upbuilding of his constitutiton through abundance of milk and the avoidance of dietary indiscretion, although there was no indican in the urine to show evidence of toxemia, and the intestinal tract seemed to be in perfect functunation. We also administered the hypophosphites, and treated him with electricity down the spine thrice weekly with the idea of bettering his nervous tone. After these ministrations for six weeks, I found that while his general condition was better, the symptom pain still persisted. This man had tried the climate of Denver and while there claimed that the pain was much more severe than when in Philadelphia, practically at the seashore level. The observations of the patient, who is a very intelligent man, made me again think over the problem of altitude as related to the pain.

These two cases coming in close succession and of the same disease distinctly made worse by sudden ascent, in the first case 2,500 feet above sea level, and in the second case of a mile above sea level at Den-

ver, were striking examples of reverse conditions of pain I had noted in a previous paper wherein the pain of tabes seemed to be bettered by high altitude. The thought has come to me, in order to explain the matter, that in essential neuralgia, so-called, as these two cases are, a sudden lowering of atmospheric pressure produces a congestion of the superficial facial tissues, and therefore irritation of the peripheral supersensitive sensory neurons in the patients. Any sudden reduction of atmospheric pressure would, therefore, through such engorgement *per se* and also no doubt through the retention of waste products within the blood pabulum, cause an irritation which will be harmful in neuralgia. In the cases of posterior sclerosis referred to, where the pain was bettered by the same reduction of atmospheric pressure through altitude, it would seem to the writer to be explained by the fact of this same reduction of pressure of the surface of the body, relieving, in consequence, the congestion about the nerve roots which is the partial cause of the pain in tabetics.

The subsequent history of the two patients recorded above shows that they are distinctly better of the neuralgia both as to severity and as to prolonged intervals of attack at the present date. In both cases, Philadelphia and vicinity was not a good climate for them; the young lady being very well indeed at the low altitude in North Carolina; the physician from whom I received a letter recently, being greatly benefited by a sojourn at St. Louis, Mo.

There are other considerations of meteorologic nature which undoubtedly must be brought into account in studying pain. We believe that careful scientific observations of this subject in the future, taken upon a large scale in various parts of the country, will be productive of great good; for we feel confident that there is much to be learned in such careful observation of climatology of disease. Dr. S. Weir Mitchell, the pioneer in the study of relation of pain to storm centers, has continued his studies in a recent contribution before the College of Physicians of Philadelphia* (May 6, 1903) and finds that with the advent of storm conditions, which implies lowered barometric pressure, headaches are aggravated. This observer also notes on his prepared chart that chorea is likewise more prevalent during the same atmospheric state, i. e., one of lowered air pressure.

Some observations we made for Dr. Mitchell which are recorded in his "Clinical Lessons," also bear out the idea that no doubt increase of blood pressure from any cause will excite or increase pain when it is due originally to pressure from force behind (vis-a-tergo) producing a superficial sensory disturbance; for in the cases of erythromelalgia

*The Relation of Headache to Storm Conditions.

recorded there as indicated, when the limb was hung pendant the pain was excited immediately, and there was a rise of the superficial temperature of the foot affected. The whole subject is one of intense interest to medicine and to the patient sufferers from disease.

HEMORRHAGE INTO THE CRANIAL CAVITY FOLLOWING INJURY TO THE SKULL.*

CHARLES H. LEMON, M. D.,
MILWAUKEE.

The factors which enter into the production of hemorrhage of the brain are so complex that in every case of severe injury to the skull the possibility of its occurrence becomes a question of serious considération. The delicate structure of the brain itself, its rich blood supply and the numerous foraminæ at the base of the skull through which these vessels enter and leave, and the resiliency of the skull as a whole, are the important factors which predispose to this serious lesion.

Much has been written during recent years of the result of studies made upon the skull to determine its resiliency. The practical unanimity of investigators widely separated as to the ability of the skull to adapt itself to differing diameters without causing fracture is established. It is equally well established that the skull may by over-compression in any of its diameters cause fracture in the direction of the force applied and again immediately spring back into position with its normal contour restored. It is this normal resiliency of living bone which makes diagnosis so frequently difficult, the fissures caused by over-compression closing so perfectly as to many times escape the most careful investigation.

The statement has been made with considerable truth, that after all, but little can be done in injuries of the head beyond elevating depressed fractures and controlling hemorrhages of the meningeal vessels. Were this even done in all cases where the symptoms are

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 4, 1903.

unmistakable, many lives sacrificed in the past would be saved in the future.

The pathology of these intra-cranial lesions has, however, often been misinterpreted and cases of cerebral compression from edema of the brain with marked focal symptoms have been construed as cases of concussion of the brain with shock. All of us who have witnessed these post mortems have been astonished from time to time to find so little evidence of gross traumatism in the brain tissue.

When we reflect that large defects of the bony skull have occurred in many individuals with considerable loss of brain substance, involving large areas of the cerebral cortex and that these individuals have lived many years thereafter, often times being engaged in occupations requiring the active exercise of the mental faculties, the question arises naturally, why should a hemorrhage from the middle meningeal artery causing only a circumscribed compression area of the brain so frequently cause death.

Where the brain is suddenly flooded with blood derived from the great venous sinuses, following the caving inwards of the skull base, the fatal symptoms at once manifest themselves and operative interference is manifestly impossible. But when the hemorrhage either from the base or at the convexity of the skull is slow in its progression, and grave symptoms are delayed in manifesting themselves, a complex of symptoms frequently develop that are not only worthy of our most careful consideration, but reduced to a logical conclusion point out to us a method of relief that none but the timid or those lacking the courage of their convictions will hesitate to act upon.

All tissues of the body subjected to traumatism react in the same manner. The ecchymosis of the skin which follows a blow on the face and the hematoma which marks a traumatism of the deeper soft structures with its consequent edema of the surrounding tissues is elementary experience. We have frequently seen post mortem findings in injuries of the abdominal viscera, indicating the widespread inflammatory processes that may result from contusion of the abdomen, but for some unaccountable reason we do not seem to realize that the same pathological finding, following trauma of the skull, may result in the delicate tissue of the brain.

An injury to the skull which results in total unconsciousness requires careful observation and a thorough analysis of subsequent symptoms. Especially is this true when the unconsciousness is prolonged over a number of hours or days, whether there is demonstrable hemorrhage from or within the cranium as manifested by the positive

escape of blood from the ears, or nose or mouth, or manifested by ecchymosis in the mastoid region or in the region of the orbit.

There are other symptoms less apparent to the untrained eye, but none the less characteristic, that we should familiarize ourselves with. A tendency to sleep, recurrent vomiting, twitching of the muscles of the face or extremities, incontinence of urine and feces, marked restlessness, convulsions, a slow followed by a rapid pulse, inequality of the pupils, their reaction to light, the involuntary rolling of the eye balls, the loss of the superficial or deep reflexes, increasing paralysis of an extremity, a gradually deepening stupor, elevation of temperature with remissions, unconsciousness of profound character followed by a period of consciousness of greater or less duration, to be followed again by unconsciousness—these and other symptoms of like character point to one sign, a pathological condition of the utmost importance, intra-cranial pressure—and so far as the ultimate effect upon the patient is concerned, it matters not whether that intra-cranial pressure is the result of arterial or venous hemorrhage, of direct pressure by depressed bony fragments, or of edema of the brain resulting from contusion; whatever the causal factor may be, when that clearly defined sign manifests itself in a group of the above symptoms, our duty becomes plain and imperative—we must relieve the intra-cranial tension.

Permit me at this time to emphasize the statement which is no longer debatable, that it is not necessary to have a fracture of the skull in order to receive a grave or fatal injury to the brain. The extent of the fracture in many cases is in inverse ratio to the injury inflicted. The general yielding of the bones dissipates the lines of force protecting the cranial contents. On the other hand a circumscribed fracture may be accompanied by the most alarming symptoms, or the symptoms of intra-cranial pressure may supervene without a fracture of the skull at all and without a demonstrable contusion of the scalp.

If experience has taught us anything it has demonstrated that many fractures of the base of the skull are followed by recovery. Many of these fractures are little more than minute fissures causing temporary symptoms only and are, therefore, frequently overlooked. The older surgeons who treated these cases with leeches and strong purgatives for the purpose of depleting the vessels of the brain and limiting inflammatory reaction, builded wiser than they knew. We have but to add to this treatment the application of the ice-bag and the use of antiseptic solutions in cavities communicating with the brain through fissures, in the early treatment of these fractures, and the empirical practice of pre-aseptic days becomes later rational practice, based on a

sound surgical principle, namely—that inflammatory reaction occurring under conditions of pressure leads to early and very rapid tissue degeneration; sepsis being favored by pressure necrosis and anemia.

If the escape of blood from the mouth and nose or ears in fractures of the base of the skull is commensurative with the intra-cranial hemorrhage, other things being equal and sepsis avoided, as it is possible many times to accomplish, the prognosis is by no means grave. The fatal cases are those in which the momentary wide separation of the fractured surfaces cut everything in their path and then springing back into position, provide no exit for the hemorrhage, which quickly floods the brain.

The anterior, middle and posterior fossæ of the skull are alike the seats of these basal hemorrhages. All three fossæ at times are involved in the one fracture, leading to rapidly fatal and inoperable hemorrhage.

The posterior fossa is important because of the enormous venous sinuses which traverse it, yet even these may be torn across in circumscribed fracture of the occipital bone, and if the treatment is prompt and efficient recovery will follow.

The middle fossa, containing as it does the foramen spinosum, through which the middle meningeal artery enters the skull, presents perhaps the widest field for operative interference in arresting hemorrhage from the branches of this important vessel. Extensive hemorrhage into the middle fossa at the base of the brain accompanied by convulsion, may follow fracture of the base caused by a fall on the head, and an hour after the injury, the only symptom may be a tendency to sleep, the pulse, pupils and temperature being normal. The later symptoms appearing always within the first ten days following the injury will make the diagnosis, however, sufficiently clear. It is this class of cases we predict, that will more frequently in the future than in the past be submitted to trephining and drainage. The symptoms of rupture of the middle meningeal high up, causing hemorrhage and pressure in the motor areas, are so well known as to need no special reference. The symptoms laid down by Jacobson are classical and if studied carefully should prevent errors in diagnosis. Many of these fractures of the lateral aspect of the skull radiate to the base. If this fact is borne in mind an exploratory trephining low down in the middle fossa will sometimes reveal a clot at the base, difficult, it is true, to remove entirely, but under the stimulus of drainage with its relief of intra-cranial pressure, capable of being removed and leaving no untoward symptoms.

Hemorrhage into the anterior fossa is usually the result of direct

force applied to the anterior skull wall. It may be as indicated above the result of an extension of an extensive fracture of the base anteriorly. In the writer's experience they are most frequently caused by the sudden contact of the head while on rapidly moving trains with fixed objects; the contact of rapidly moving parts of machinery or flying fragments of material; objects falling from a height striking the forehead, or from penetrating wounds of the orbit.

In the anterior fossa we have the most tolerant portion of the brain to pressure. If the force causing the hemorrhage is sufficient to open the ethmoid bone freely and permit the escape of the hemorrhage, with antiseptic precautions these cases recover rapidly. When, however, the necessity for the maintenance of aseptic drainage is overlooked in the slightest degree these patients rapidly succumb to pyemia. One of the cases operated on by the writer received an extensive compound comminuted fracture of the frontal bone, necessitating the removal of both walls of the right frontal sinus, which were driven into the brain, the orbital plate of the frontal bone, and the internal angular process of the right orbit. Severe hemorrhage occurred from the ethmoidal arteries, the line of fracture extending into the ethmoid bone.

This case, treated in one of our best hospitals for two weeks, showed no elevation of temperature above 100 degrees, the pulse was normal and the extensive wound of the forehead healed by primary union. As the walls of the frontal sinus were destroyed, ample provision for drainage of this sinus was made by keeping a drainage tube in the right nostril, the nose being frequently irrigated. After two weeks' successful treatment the patient was permitted, foolishly it is admitted, to go home to a neighboring city. The attending physician ignored the advice as to the necessity of maintaining free drainage. The patient went about the city doing as he pleased and in three or four days the inevitable happened: infection, pyemia and death, the infection occurring two and a half weeks after the operation. In infection of the meninges following fracture of the skull, it is pyemia and not meningitis that is to be feared. With drainage and the use of the moist antiseptic dressing an ordinary suppurative meningitis may recover. When a pyemic process develops it is rapidly fatal.

By way of illustration permit me to cite the following cases as exemplifying in a typical manner the thought the writer has endeavored to demonstrate in presenting this paper, the necessity of relieving intra-cranial pressure, from whatever source it may arise.

A child, 11 years old, fell from the fifth story of an apartment building undergoing construction, to the basement. Came under

observation thirty minutes later in a state of coma. Marked contusion of the left temporo-parietal region. Horseshoe flap exposing contused area showed comminuted fracture of the parietal and temporal bones. No extra-dural hemorrhage. Dura incised. Bones replaced and wound closed with capillary drainage by twisted strands of cat-gut and a heavy moist boric acid dressing. Consciousness returned in six hours. No anesthetic was used. Capillary drainage was maintained for five days. Wound healed in eight days. Child showed brain symptoms due to irritation for several weeks after accident. All symptoms had disappeared and the child was well six weeks after the accident.

Hattie Tuchel, June 10, 1898, while a passenger on a rapidly moving car put her head out of the window and was struck with an iron pole. She received a compound comminuted fracture at the right side of the skull above and behind the right ear. The temporal, parietal and occipital bones were involved in the fracture. The dura was torn and some brain substance lost. The girl, who was 12 years old, remained totally unconscious eleven days, with complete left hemiplegia for three weeks from time of accident. Suppurative meningitis occurred. It was necessary to remove a large section of fractured bones at primary dressing. This case was treated with the ordinary dry antiseptic dressing. Infection of the field occurred through the ear. On account of the free drainage permitted by the large defect in the skull the child recovered and was perfectly well in eighteen months after the injury. Had moist dressings been used in this case as in all the others treated by the writer the danger would have been lessened and the convalescence hastened.

John J. Murray, injured April 17, 1903, by falling from a trestle forty feet to the ground, was found unconscious with compound fracture of the right wrist. Multiple contusions of the body especially marked in the right hip. Man regained consciousness in about an hour and had a slight ecchymosis in the right orbital region. There was no demonstrable contusion of or injury to the scalp, which was carefully examined. Within a few hours of the accident the patient was very restless and developed paralysis of the sphincter ani and the bladder. The fracture of the wrist was reduced and remained aseptic. The temperature, which had risen to 101⅘° the day following the injury, gradually declined, reaching the normal point five days after the injury. During this time, however, the patient was very restless and after the third day passed his urine involuntarily. From the fifth to the ninth day the temperature rose from normal to 100⅘°. On the tenth day it rose suddenly to 103⅕° and the pulse ran up to 142. The patient became markedly comatose and developed a partial paralysis of the right arm and the right leg. On the eleventh day at noon the right hemiplegia was complete. At 6 p. m. the temperature was 102°, the pulse 144, the respirations 10 per minute, coma complete.

The diagnosis of this case was by no means clear. It was treated from the beginning by Dr. E. J. Purtell and on the eleventh day at his request Dr. W. H. Earles and myself saw the case in consultation. The entire scalp was shaved and a minute examination failed to

disclose the slightest evidence of injury. The fact that the focal symptoms developed so late and became so rapidly complete led to the belief that possibly a hemorrhage had occurred from the posterior branch of the middle meningeal artery on the left side and that a meningitis had developed at the base and was ascending to the vertex. It was clearly evident that fatal intra-cranial pressure from some source existed. That the pressure was the result of simple edema following contusion of the brain had not occurred to any of us.

Experience has demonstrated to my entire satisfaction that in the treatment of skull injuries, where there were marked focal symptoms or extensive hemorrhage, the cases which have been subjected to drainage have uniformly done better than those which were not drained. In the first case cited the injury was a contusion of the brain which resulted in inflammation with its consequent edema. In the second case cited, in addition to the contusion and laceration of the brain substance we had infection by pus microbes, and yet with free drainage the case recovered. In the present case there was nothing to suggest hemorrhage except the focal symptoms which appeared on the tenth day. No blood had escaped from the mouth, ears or nose, and no ecchymosis appeared anywhere excepting in the region of the right orbit. With a view to relieving the intra-cranial pressure operation was advised, although the case seemed hopeless—the writer was permitted to make the operation. In order to meet best all possible conditions the trephine was placed a little below and in front of the posterior branch of the middle meningeal artery on the left side, as found by Steiner's rule. This opened up the middle fossa of the skull. Upon removing the button of bone no extra-dural hemorrhage was found. The opening was enlarged and the dura was seen to bulge into the lower angle of the opening. With the chisel the opening was still further enlarged and the dura incised. To our surprise a contused area of brain tissue immediately appeared in the wound. The center of the area was markedly ecchymotic and the brain cortex surrounding it appeared thickened and infiltrated. There was no pulsation of the brain. A director was introduced beneath the dura and the cerebro-spinal fluid allowed to escape. It came slowly at first, but gradually increased in volume until at the end of ten minutes the brain began to pulsate vigorously. The dura was again sutured, capillary drainage with twisted strands of cat-gut introduced down to the dura and the remainder of the wound sutured. The man's condition improved at once, so that toward the end of the operation a little ether was administered, as the patient showed signs of irritation. The subsequent history of this case is briefly summed up.

Heavy moist dressings were applied to the wound and there was a free discharge of serum and cerebro-spinal fluid for three days. The day following the operation the right pupil reacted to light and the man could close the right eye-lid. The second day there was some motion in the right arm and the right leg. The third day the man regained complete use of the right arm and the right leg. With the exception of a slight rise of temperature on the fourth day following the operation, the temperature which rose to 103° the night of the

operation, with a pulse rate of 156, fell gradually to the normal. The pulse reached 80 two weeks after the operation. It is noteworthy that the man did not regain control of the bladder until two weeks after the operation.

This case is reported in full, as it is not only unique, but seems to open a wide field for future investigation. In those cases of concussion of the brain allowed to die without operative interference and buried without post mortem examination we may well ask ourselves the question, have we done our full duty. As we have watched these cases sinking gradually day after day, have we not lost sight of the fact that in the arrest of a fall when the delicate structure of the brain is contused by its sudden sharp contact with its bony envelop it must undergo the same pathological process with all its attendant inflammatory changes that other soft tissues undergo, more favorably situated for the purpose of expansion.

To expect then in addition to repair of contused brain tissue resorption of exudate or hemorrhage by a physiologically impaired organ is well nigh to the border of expecting the miraculous to happen. As a sequence of these injuries treated by the expectant method we find cysts, meningeal changes, abscess of the brain, psychical neuroses and death.

If the proposition laid down here is sound theoretically as it appears to be clinically, much may be hoped for in the future treatment of many apparently hopeless cases of cerebral injury. The practice of the older surgeons was limited to attempts to evacuate pus in isolated cases, the case of Dupuytren cited by Erichsen being regarded as a stab in the dark by a bold operator, when, finding no pus on the surface of the brain after trephining, he boldly plunged a knife into the substance of the brain and luckily evacuated the abscess. The tendency of contemporary surgeons is to differentiate these operable cases into well known groups and the practice is never to operate unless the cases fall into one or the other group. It is the opinion of one able essayist, that come what may, unless clear focal symptoms develop or other well known definite signs of hemorrhage present themselves, no operation is justifiable. That even though a case here and there is successful the plan is unscientific and disaster is sure to follow.

The fear of opening the dura that possesses so many, the near future is destined to dissipate, since the trend of opinion among neurologists to-day is, that epilepsy is not primarily an irritation of the cerebral cortex, but rather a toxemia the result largely of gastro-intestinal disturbance manifesting itself in persons of a predisposed temperament.

If the thought of intra-cranial pressure is kept clearly in view in all head injuries and the necessity for its relief aimed at as the important indication, the question of when and where to operate becomes of secondary importance. The older writers noted the fact that cerebral edema simulated localized hemorrhage.

The writer recalls a case of sarcoma of the brain treated by Prof. N. Senn many years ago. For the purpose of affording room for the inoperable tumor to grow, large defects were made in the lateral walls of the skull and the man's life was materially lengthened. The patient could be made totally unconscious by the mere compression of the brain between the hands.

To recapitulate then, the argument is, not that all cases of brain contusion and laceration should be operated on, but, as many cases give clinical symptoms that are out of proportion to the actual extent of the injury inflicted upon the brain, instead of waiting for classical symptoms to show themselves differentiating the case into some well known group, when the signs of cerebral compression manifest themselves and the life of the patient is thereby imperiled, it becomes the duty of the surgeon to select some plan for relieving this undue tension. The principles of surgery are no better exemplified than in the inflammatory process which occurs in the brain under tension. The reasons for making a window in one of the long bones within the first forty-eight hours for the relief of tension in osteomyelitis are no more convincing or imperative than are those for making a window in the skull for the same purpose. The tact and judgment of the surgeon will many times be taxed to the utmost in coming to a decision as to what should be done in this obscure class of head injuries, yet let us hope, that in the future more frequently than in the past, we may be warned early by the signs of approaching fatal compression of the brain from hemorrhage or from its own inflammatory secretions and by the trephine and chisel furnish an avenue of escape for these products of inflammation.

Discussion.

DR. A. J. BURGESS, Milwaukee—I was not aware that I was to have the honor of discussing this paper until I saw my name on the program. I have seen no copy of the paper, and therefore made no preparation to discuss it.

I wish only to emphasize one point, and that is, that the class of cases, in which there is no great apparent external injury, but where these dangerous symptoms which have been detailed by the writer in his interesting paper, occur, and the cases where hemorrhage comes on and the evidence of it is not complete immediately, but appears gradually, are those which have always been neglected. The cases that have had compound fractures have been treated at once, and if there was hemorrhage it was known, and if it occurred later

it became known; but in the cases where there has been no compound fracture, no laceration of the soft parts—as I say, those cases are the ones that have always been neglected, and those are the cases which can most easily be saved in many instances, and they are the cases which should be most carefully studied, and which should be dealt with, as the doctor has stated, by relieving intra-cranial pressure.

DR. W. H. EARLES, Milwaukee—Mr. President and Gentlemen of the Society. First of all I wish to endorse every thought expressed by the writer in his paper. I believe it is absolutely sound, and as I have had the pleasure of associating with Dr. Lemon in a great deal of head surgery, I must say that every proposition propounded in that paper is backed by the clinical experience that the writer has himself had.

That we may more fully understand the necessities of the situation where we have injury to the skull, with possible intra-cranial pressure, we must first of all learn to recognize this one fact, which I believe has been clearly demonstrated by such men as Starr, Horsely, McEwen and others, that any injury to the skull sufficiently forcible to produce fracture is also sufficiently forcible to produce severe injury to the brain, its covering or circulation. The second proposition is, that we may have a very pronounced injury of the brain, its circulation or covering, with no surface wound whatever to indicate that the skull had received any injury.

When we learn these two propositions thoroughly and believe in them, it will be an easy matter for us to comprehend all that the writer has said in his paper to-day.

The next thing for us to learn is that where there is any pronounced suspicion of intra-cranial pressure, whether it be blood or serum, it is the duty of the surgeon to relieve it. If you have even a minute injury to the brain and its circulation, you are going to have oozing, and if it becomes sufficiently pronounced, then it is the duty of the surgeon to enter the skull. Why not enter it? We can enter the skull to-day with the same degree of safety that we can the abdominal cavity; and who hesitates to enter the abdominal cavity when he suspects that in the abdomen there is a condition jeopardizing the life of the patient?

It is gratifying to note all along the line, the marked progress of head surgery. At the last meeting of the American Medical Association there was pronounced evidence of it; and in the classical paper we have just listened to, I think we have good, sound surgical principles enunciated which it would be wise for all of us to remember.

I again wish to say that I feel personally indebted to Dr. Lemon for it, and heartily endorse every thought that he has expressed in his paper.

DR. A. H. LEVINGS, Milwaukee—There are some points which should perhaps be brought out, which the doctor has not touched upon. One of these is, that in injuries of the skull not only may the middle meningeal artery be ruptured with a clot of blood between the dura and the skull, but also a branch of the middle cerebral may be ruptured, producing a clot of blood which rests inside of the dura or upon the brain.

It is stated by Phelps in his great work on injuries of the skull, that a traumatism of the head never produces a rupture of the middle cerebral artery or of its branches; and that it can only produce a rupture of the meningeal. This I know to be erroneous from my own experience, which includes three

cases of rupture of the middle cerebral artery from an injury, without fracture of the skull.

Another point I wish to lay special stress upon is this, that in injuries of the head with marked symptoms, the condition is not necessarily due to hemorrhage. The hemorrhage may be extremely slight, insignificant and apparently of no consequence. It should always be borne in mind, however, that contusions of the brain or of the membranes, and more especially lacerations of the brain, are of the greatest importance and demand special consideration in head injuries. Hemorrhage may nearly always be controlled, lacerations of the middle meningeal or middle cerebral artery can practically always be put under control, but a contusion of the brain or a laceration of the brain can never be corrected by operative means. When one is about to operate I think he should have a clear conception of what he is going to operate for, so that he may be able to determine whether the condition can be benefited by operation or not. Of course, in injuries pressure is produced by hemorrhage, depressed bone, inflammatory exudates, or it may be produced, as the writer has stated, by progressive edema, but certainly progressive edema requiring operation is rare. It has only come into the literature lately. In lacerations or contusions of the brain the symptoms are manifested at once.

Pressure from hemorrhage or edema comes, with very rare exceptions, only after some hours. If we consider that there has been a considerable period of consciousness following an injury, and if then unconsciousness supervenes, we have a pressure which often, perhaps nearly always, may be relieved by operative measures; but if coma occurs at once and is unassociated with fracture and depression, the probabilities are that we are dealing with an injury to the brain which cannot be relieved by operative measures.

DR. C. O. THIENHAUS, Milwaukee—I should almost gather from the tenor of the paper that the writer advises operative procedures for all contusions of the skull followed by fissures and fractures and all cases of intracranial hemorrhage. Now, when a man has an apoplectic stroke with hemorrhage into the brain, is it advisable in such cases to operate? Certainly not. Furthermore, when we have to deal with a case of severe contusion of the skull, it is our first duty to define the location of the lesion and make a strict differential diagnosis between concussion and intra-cranial pressure produced by hemorrhage, before resorting to operative procedures. I will at this place not go into the details of differential diagnosis in such cases, but would like to call the attention of the Society at this place to a question of great scientific interest with which I had to contend recently and which belongs into the realm of this paper. You know that oftentimes following births in cases of contracted pelvis, with or without forceps delivery, depressions of that parietal and temporal bone occur, which passes the promontory. Many of these children die, some of them, without question, because of asphyxia produced by the prolonged delivery. But in other cases where this cause of death was not in evidence, one attributed the death to pressure on the brain produced by the depression of the bone. Recent post mortems in such cases, however, have demonstrated that in all cases which died, the death was to be attributed to intra-cranial hemorrhage complicating the depression and not the depression itself. I am not aware that there has been one case cited where such a child was saved by immediate trephining because of the hemorrhage. Another question which, however, does not come under the realm of this paper is: Shall we, when the child lives, immediately raise the depression?

It has been proven that very many of these children live with such a depression without showing any symptoms of pressure or alteration of the brain by this depression, or of idiocy in later years. In other cases later on symptoms may develop which call for surgical interference. Now, if one tries to raise the depression immediately after birth, one can, in some cases, accomplish this by simple pressure on the surrounding parts of the skull, which causes the bone to snap back. In other cases of emergency it is advisable to use a small corkscrew, which, after sterilization, is screwed into the depressed part of the bone. Herewith the depressed bone may slowly be raised without injury to the brain tissue. I show you herewith a picture of a case in which there is an enormous depression produced by a rachitic pelvis. As the conjugate vera measured 7½ centimeters I advised Caesarean section out of relative indications. As this was rejected by the patient, I performed version and extraction, giving but little hope for the life of the child. Mother and child are living and well today, three months after confinement.

DR. F. SHIMONEK, Milwaukee—With reference to one point I wish to make a remark or two, and that is in fractures of the middle fossa of the skull. The fracture extends through the petrous portion of the temporal bone and into the vault of the pharynx; there is a direct communication with the external surface, in other words, we have a compound fracture, and in this the great danger of basal fracture exists. The statement was made in the paper (at least I understood it so) that antiseptic injections into the ear were advisable and proper. Now it seems to me that in using injections into the ear we run great risk of forcing septic material from the ear into the brain; and it also seems to me that in spraying the vault of the pharynx we might also force septic material into the brain. The chief danger in those fractures is septic infection of the meninges. I think the proper thing to do is simply to pack the ears with wet antiseptic gauze.

DR. WILLIAM BECKER, Milwaukee—It is true that the surgeon does not as a rule operate on cases of cerebral hemorrhage where symptoms of extreme

intra-cranial pressure are manifest. This lack of active interference is to be deplored. Wherever we have profound coma and where Cheyne-Stokes respiration and other symptoms of intra-cranial pressure appear after cerebral hemorrhage, the surgeon should be called upon to open the skull of the patient. This would certainly relieve the intra-cranial pressure, which is the fatal factor. A very minute exactitude in localizing the site of the hemorrhage is not essential, so long as the hemisphere is diagnosed—an easy proposition. If edema of the brain follows laceration of the brain or its coverings, this edema is not so much due to the immediate local lesion, but, I think, rather to changes diffused therefrom, *i. e.*, changes occasioned by the process of repair. We must also consider the effects of brain lesion on the very sensitive vaso-motor apparatus of the brain. In short, experience in the autopsy room has taught me that the vicinity of a brain bruise, no matter how slight, is always in a condition of hydropic degeneration.

Dr. Lemon had the kindness to show me the case reported. The site of the lesion had been correctly diagnosed. Dr. Lemon's novel and thoughtful operation proved a gratifying success. Successful operations, no matter how new, should be encouraged.

DR. LEMON.—In the scope of a paper to be read in a limited time of 20 minutes, of course, one cannot cover everything, and I had in mind what Dr. Levings suggested about other arteries. Of course, there are quite a number of arteries that might be torn in a fracture of the base of the skull, but I called attention to the middle meningeal because that is the one that we more commonly see.

I was unfortunate, owing to the time limit, in not being able to finish the reading of the essay because had I been able to do so I should have obviated another criticism, and that is, that all contusions of the skull were to be operated upon. Such an idea, of course, I had not in mind at all. There are certain cases of contusion of the brain cited in the paper, especially those cases which are followed by marked edema of the brain with symptoms of unmistakable character, that should be operated upon, and my object was to plead for further operative procedure in the belief that many of these cases that are comparatively frequent could be relieved. The statement that they are rare reminds me of a story about Dr. Mayo, who, when asked how it happened that he had so many more cases of gallstone proportionately than others, said that it was because he made the diagnosis more frequently; and I think if we made the diagnosis of contusion with edema, instead of concussion of the brain with shock or hemorrhage, or something else—pure guess work—in the future many cases would be saved.

With reference to the injection of these cavities: I do not believe any skillful person would inject any solutions into the ear or nose, or any other cavity communicating with the brain, with sufficient force to drive the solutions into the brain; and it is absolutely necessary, in my own experience with ears, that they should have a very thorough scrubbing out and cleansing in all of these cases where we have hemorrhage from the base of the brain through the ear.

REPORT OF A CASE OF TUBERCULOSIS OF THE ADRENALS, WITH PATHOLOGIC SPECIMENS.*

BY JULIUS NOER, M. D.,
STOUGHTON, WIS.

The symptomatology and pathology of disease of the adrenals is as yet in such a hazy condition that I feel that the report of the history and autopsy of even a single case will be of interest to members of this society. Addison gave us a very clear symptomatology of the disease as early as 1855. The fact that his autopsies usually corroborated his ante-mortem diagnosis is very good evidence of his keen powers of observation and good judgment.

B. K., who died on March 22, 1903, came under my care in April, 1893, for tuberculosis of the right sacro-iliac joint. The disease manifested itself at first in the form of an abscess which could be easily demonstrated directly above the right anterior superior spine of the ilium. This abscess was opened, traced to the point of origin, and its tubercular nature ascertained.

The sinuses and tubercular cavity were curetted some five or six times; diseased bone was removed from the ilium a number of times. The wounds were kept saturated with an emulsion of iodoform in glycerin and balsam of peru. During the first two months of treatment the patient was confined to bed and a long plaster cast was applied to the diseased side of the body. There was never any material afternoon fever, the temperature never exceeding 101° or 101½° F. There was some emaciation during the period of confinement to bed, but the patient rapidly regained normal weight after being allowed to go about on crutches. After two months of treatment he was permitted to get up and be about on crutches, a Thomas long posterior splint having been applied to the diseased side of the body and a thick soled shoe to the well foot.

After one year and a half of treatment the wounds were all completely healed and the patient was dismissed as cured. He very soon got around as well as he ever did, and there were never any signs of a return of the disease at the point of original infection.

Till the autumn of 1901, B. K. never showed any symptoms of disease, but continued to be in perfect health. He became an active, enterprising man of affairs. After the discovery of gold at Nome, Alaska, he became interested with his brother in a mine at that place and spent two summers there.

In the autumn of 1901 he was not as well as usual and for this reason decided to spend the winter in California. While in San Francisco during this winter he was taken very sick, the symptoms being

*Read before the Central Wisconsin Medical Society, April 29, 1903, at Beloit, Wis.

referable to the liver and digestive organs. His San Francisco physician made a diagnosis of interstitial hepatitis. The patient recovered sufficiently to return home in the spring of 1902.

The day after arrival he called at my office. He was very much emaciated and there was most complete prostration and languor. His general physiognomy had undergone a complete transformation. The skin was a saffron yellow, with a large number of dark brown spots about the face, forehead, back of hands, arms, in the arm pits and in the folds in the groins. These spots were variable in size, from one-eighth to one-fourth inch in diameter, and were most marked on the face and on the back of the hands. There was slight bronzing of the skin of the forehead. There was no pigmentation of the mucous membranes, nor did any appear later.

The pulse was small, rapid, 80 to 90, and feeble. Temperature was normal; the tongue was coated; there was no appetite or desire for food. The extreme prostration and languor was a marked feature in the case.

The urine taken for 24 hours was carefully examined microscopically and chemically. No abnormalities were present. Stools were normal.

The patient was rather nervous and irritable, sleep not always good. Bowels were regular as a rule, but there were two periods of loose bowels during the four or five weeks following his arrival home.

From the totality of symptoms this case presented, a diagnosis of tuberculosis of the adrenals seemed to me to be the only possible conclusion. Malignant disease of the liver, pancreas, or abdominal viscera appeared to me to be justifiably excluded.

The patient was accordingly put upon Armour's prepared powdered extract of the adrenals of the sheep, together with glycerated extract of red bone marrow. He continued to take these preparations with apparently good results till the following December.

After about two months' treatment, his weight gradually increased and his strength improved very materially. His improvement was so steady and pronounced in every way that I began to doubt the correctness of my diagnosis. About this time—early in December—the question of sending him to a milder climate for the winter came up, some of his friends being inclined to favor the idea of sending him to California. To this I was opposed, as I was afraid that the exhaustion incident to the long journey might be disastrous to him.

At about this time Dr. J. B. Herrick, of Chicago, was consulted. Dr. Herrick was disposed to regard the case as one of latent tuberculosis and favored the idea of sending the patient to Southern California for the winter. He recommended a general tonic and sustaining treatment.

The patient continued to improve and gained over ten pounds in weight during the winter months. He did not go to California, however, for the reason that he himself had dreaded the long journey.

On March 17, 1903, he was taken suddenly ill with acute tonsillitis. Tonsillar abscess developed on the left side, and ruptured spontaneously on the third day. He appeared to hold his own very

well during the first three days of the disease, but immediately after rupture of the abscess the pulse failed and there was complete collapse. Heroic doses of heart stimulants were at once given and saline transfusion administered. There was a temporary revival, but the prostration soon returned and the patient died at 5 a. m., March 22, 1903.

An autopsy was held, at which were present, besides the writer, Drs. N. Quisted and S. M. Trulson. Rigor mortis was marked 36 hours after death. Color of the skin was a dark saffron yellow, the conjunctivæ a decided yellow. Slight bronzing of the skin of the forehead; a large number of dark brown spots appeared on the forehead, face, neck, and on the back of the hands; no brown patches on mucous membrane. Emaciation not marked.

The abdominal fat was found to be abundant. Stomach, pancreas, peritoneum, and mesenteric glands appeared normal. Spleen seemed large and engorged. Liver seemed normal except lobus quadratus, which appeared macroscopically to present small suppurative foci. Microscopic examination showed this to be not the case. There was engorgement of the right kidney.

Both the supra-renals were in a state of complete caseous degeneration. The specimen here shown presents the characteristic caseous tubercular degeneration of this gland. The gland structure is completely destroyed, nothing remaining except the outer fibrous capsule.

Coxa Vara as a Static Deformity.—VICTOR BLUM (*Arch. f. klin. Chir.*, Bd. 69, Heft 4) after discussing the classifications adopted by various authors, gives one which he considers most rational and founded upon the conditions which obtain in the malformation. He divides Coxa vera into 1, Congenital; 2, Traumatic; 3, Static. Cases which would fall into the first two divisions he considers of such rarity that they may well be omitted.

The third he again subdivides into: 1, Coxa vara adolescentium; 2, rachitis; 3, senile osteoporosis; 4, ostitis fibrosa; 5, osteomalacia; 6, tuberculosis; 7, arthritis deformans; 8, osteomyelitis; 9, trauma; 10, overburdening of the femoral neck on one side.

To justify his classification he describes numerous museum preparations of the disease and also gives the history of a case which would come in his tenth division. This case he was fortunate enough to obtain at its very beginning and he had it under his control for some time. He also gives an x-ray photograph of the case.

In continuation and in support of the above article, Blum (Wien. klin. Wochenschrift, May 7, 1903) cites another case in detail in which both sides were affected. (G. P. B.)

WISCONSIN MEDICAL JOURNAL.

OFFICIAL ORGAN OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A Monthly Journal, published by the Wisconsin Medical Journal Publishing Co., and owned by and devoted to the interests of the Medical Profession of this State.

Original articles, Clinical notes, Correspondence, and Communications of interest to the Medical Profession are solicited. Reprints of articles contributed to this Journal will be furnished at cost price, but a number of copies of the Journal will be furnished contributors gratis. All manuscripts should be typewritten.

ARTHUR J. PATEK, A. B., M. D., Editor,
121 Wisconsin Street, Milwaukee.

Associate Editors.

CHAS. S. SHELDON, M. D., Madison. OTTO H. FOERSTER, M. D., Milwaukee.
HOYT E. DEARHOLT, M. D., Milwaukee. ALBERT W. MYERS, M. D., Milwaukee.

Collaborators:

Horace M. Brown, M. D.,	Milwaukee	U. O. B. Wingate, M. D.,	Milwaukee
Arthur J. Burgess, M. D.,	"	Chas. Zimmerman, M. D.,	"
Richard Dewey, M. D.,	"	Frank H. Edsall, M. D.,	Madison, Wis.
Louis Frank, M. D.,	"	W. E. Fairfield, M. D.,	Green Bay, "
Walter Kempster, M. D.,	"	Wm. E. Ground, M. D.,	W. Superior, "
William Mackie, M. D.,	"	Julius Noer, M. D.,	Stoughton, "
Solon Marks, M. D.,	"	Chas. W. Oviatt, M. D.,	Oshkosh, "
P. H. McGovern, M. D.,	"	L. H. Prince, M. D.,	Palmyra, "
Gilbert E. Seaman, M. D.,	"	H. Reineking, M. D.,	Sheboygan, "
Wm. H. Washburn, M. D.,	"	W. T. Sarles, M. D.,	Sparta, "

Annual Subscription, - - - $1.00. Single Copies, - - - - - - $0.10.

Address all business communications to
M. M. TAYLOR, Business Manager,
709 Herman Bldg., Milwaukee, Wis.

Vol. II. SEPTEMBER, 1903. No. 4.

EDITORIAL COMMENT.

HYDROPHOBIA.

Hydrophobia has prevailed in Wisconsin to an unusual extent during the past two years, many cases having existed among animals, and over one hundred persons from the state have taken treatment at the Pasteur Institute, Chicago. It is of interest to note that of the ninety-six cases treated at the institute, from January 1, 1902, to August 20, 1903, reasonable evidence of the existence of rabies existed in but forty-six. The other fifty persons were bitten, or in some other way exposed to animals that were immediately killed, or escaped and

no subsequent history could be obtained, and it will probably never be known whether these persons were liable to develop the disease or not.

The idea is quite prevalent among the laity that if a person be bitten by a dog and the animal ever develops rabies afterwards the person so bitten is liable to develop the disease—hence some believe that if the dog be killed before he develops the disease they are protected. This erroneous impression should be corrected as fast as possible. It is well established that in man or animal rabies only develops after being bitten, or in some other way infected, by a mad animal, that the disease never develops spontaneously in either man or animal; and it is claimed by good authority that but 16 per cent. of persons bitten by rabid animals develop rabies, but this is probably a low estimate. According to Nocard and Roux the saliva of a rabid dog is virulent only twenty-four to forty-eight hours before the appearance of symptoms, and the dog will usually live only two to five days, and it is generally safe to say that if a dog lives and shows no symptoms of the disease for a week after having bitten a person no danger is to be feared. It is of much importance not to kill a dog at once after having bitten a person; he should be confined if possible and watched, for if he shows no symptoms of the disease within a week's time it is of the greatest relief to the person bitten, and it is well known that there is a true and false hydrophobia liable to exist in persons, and that death has been known to result from the false disease. In a case of false hydrophobia it is of the greatest importance to be able to assure the patient that the dog from which he received his bite was not rabid, moreover the attitude of the attending physician in such cases may decide the matter of life or death in certain nervous persons. Dr. Wm. Broaddus Pritchard, of New York, in the *Medical News,* for August 15, 1903, gives the following points in the differential diagnosis between true and false hydrophobia:

"In pseudo or hysterical hydrophobia, the incubative period is either much shorter or much longer than in the true disease—symptoms developing earlier than a week or ten days, or even three or four weeks after the bite are suspicious, just as delay beyond five or six months is suspicious of pseudo disease. It should not be forgotten, however, that the true disease has developed within five days from the bite, and that it has been delayed for as much as twelve months. Symptoms developing within a day or two after a bite are almost certainly hysterical. The order of sequence in the hysterical disease is characteristic sometimes. There is no first or second stage. The patient develops at once the second or convulsive stage. Hysterical

hydrophobics nearly always show a disposition to bite those about them—very rare in the genuine disease; they also bark, and growl and snap with much more imitative accuracy than in the genuine disease. To show them the dog that bit them, alive and well, is often a final test, the result being immediate recovery. Should the symptoms in any case last over seven or ten days at the most, this fact alone is almost conclusive as to the non-existence of the genuine disease."

The treatment of bites of suspected dogs is of much importance. It appears well settled that the merest scratch is as liable to contain an infection as are the deeper wounds; that the infection is fermentive in character, lying localized for at least twenty-four hours and then infecting the system by way of the nerves and not directly by the blood. It is claimed by the best authorities that thorough cauterization of the wound within twenty-four hours after the bite is effectual, and fuming nitric acid is advised as the best agent; the next best agent is the actual cautery. An anesthetic should be administered if necessary, the wounds scrubbed out with a brush and green soap followed by 1-1,000 solution of the bichloride of mercury, then fuming nitric acid applied thoroughly by means of a glass rod, and the wound dressed surgically. Of course treatment at the Pasteur institute is the surest preventive, and should also be taken as soon after receiving the bite as possible. In case true hydrophobia develops in a person treatment should not be neglected but suffering should be relieved as far as possible by the aid of general anesthetics, chloral and morphine. Hope of recovery should never be given up as long as there is life, as no less an authority than Gowers reports a recovery, and believes such is possible.

In order to prevent the disease all stray, ownerless dogs should be destroyed, and those allowed to roam about should be muzzled. The opposition to the muzzle is not well founded, for it has been proven by statistics that in both London and Berlin the disease has been eradicated by this means, and if the dog is properly muzzled and properly cared for no cruelty can be inflicted.

In all cases where the dog is suspected of having rabies he should be carefully preserved alive for at least a week, and if he remains well there is no danger; if he dies, or is killed, the head should be removed well down on the neck so as to preserve the medulla, and sent through the local health officer, to the State Hygienic Laboratory, Madison, where it can now be examined, free of expense, under the supervision of the State Board of Health.

HEALTH AND HOUSEKEEPING.

It is common knowledge that one of the great sources of unhappiness and discontent in the world today is the imperfect working of the domestic machinery in the modern household, and this faulty machinery with its attendant discontent and unhappiness, every medical man knows, has an important bearing upon health in many obvious ways and in some not so plainly shown upon the surface.

When Madam Seraphina Gossamer Webb suffers a sudden collapse, takes to her bed in a darkened room, denies herself to the world and summons her medical attendant, the statement goes forth that she has "heart trouble," "neuralgia," "nerve-tire" or any other convenient indisposition, but she knows, and the doctor knows, that the brave but delicate little woman has been trying with all the might of her ambitious nature to keep up social prestige, to give charming entertainments, perhaps to bring out "a budding daughter", to maintain decent order and cleanliness in a roomy and elaborately appointed mansion, to have her dinner table and her 5 o'clock teas models of easy elegance, to make everything pleasant and wholesome and homelike for her beloved John and four to six dear, carefree sons and daughters who are enjoying life to the full, and never give a thought to what they shall eat or drink or be clothed withal: only taking it as a matter of course that whatever they need will be ready when wanted.

Now, Madam Seraphina has been carrying all this domestic care and burden under the unavoidable stress and vexation of a domestic force, ill-trained, insufficient, shifty and generally incompetent—such as must perforce suffice to the average household as matters stand at the present day, and the result is a breakdown that months or even years will scarcely see repaired. The doctor knows that the materia medica contains no cure, and sends her to the sea or to a sanitarium.

The case here supposed is only an example of what, with numerous variations, may be found in the average household. The supply of domestic help seems to be exhausted. All who might be available have betaken themselves to other fields of usefulness, or inutility. The few who remain are not maids, but mistresses of the situation. The breakfast, dinner and tea "tables" are "turned." The supposed lady of the house is at the beck of her supposedly subservient sister. If it were not tragic, it would be comical to see the helplessness of many a queenly woman who has a family to preside over and make a home for. Though she have gold galore she cannot coin it into simple food and raiment, and if she be—(as mostly is the case)—the reverse of opulent,

her flesh and blood become forfeit to her task. Muscle, nerve and heart give way under the harrowing struggle. Insomnia, hysteria, melancholia, anemia, neuralgia, gastralgia, pains (frontal, occipital, praecordial, dorsal, abdominal), colitis, neuritis, tremors, tics—truly all these and other ills of body and mind according to constitution and predisposition, the doctor is compelled to witness developing before his eyes, under the stress, worry and torture of household perplexities—unless, indeed, the household *lares* and *penates* are toppled and broken and the escape is to a boarding house, flat, hotel or restaurant, mostly cheap and nasty—a social and moral loss for the parson and the philosopher, rather than the doctor, to calculate.

Again, an injury beyond computation is done by the substitution of artificial, impure machine-made foods for the natural and genuine article, in canned goods, cooked compounds, cereals, sweetmeats and pickles. Even "honey and the honey comb" are artificially elaborated from cheap materials, and coffee berries are made in molds. "Apple butter" prepared from the refuse of factories, "embalmed" meats, poisonous ice cream, deleterious bakery wares deal death quickly or slowly.

Another long list of ills flows from the unsanitary conditions which prevail. Dirt and disorder breed contagions and infections in subtle but certain ways which only the medical man can appreciate.

The extravagance and waste involved are something for the economist to deal with, but cannot escape the eye of any observant person. It might be said with some measure of truth that the waste of an American family would support two German or French families of similar means and station.

The arts of cooking, cleaning, laundering and good plain sewing seem to be "lost arts." Disorder, untidiness and extravagance are too prevalent in kitchen, laundry, parlor and chamber, to say nothing of cellar and attic. In many and many a house of high or low degree there is no one who understands either the theory or practice of the household crafts. The maid is floundering in ignorance, indifference and indolence, the mistress—whether indifferent and indolent or not—is likewise ignorant, and neither one nor the other can escape from her evil enchantment.

What shall it profit a family or an individual, though rolling (I had almost said "wallowing") in wealth, if they cannot keep themselves cleanly and properly fed, to say nothing of godly?

What is the remedy?

With becoming diffidence we should say that to overcome these evils and organize a victorious crusade against them, it is necessary

to form a domestic army, something on the plan of the "Salvation Army." The rank and file of "enlisted women," corporals and orderly sergeants, must be brought together and enrolled under the banner "house and home advancement." The proper officers must be elected or selected, but these must be such in something more than name and uniform. The gold lace, gilt buttons and shoulder straps will not of themselves accomplish the desired result. There must be heroism and *esprit de corps* in the leaders which will not only push and drive others forward but which will say "come follow me"—not satisfied with ordering an advance from a comfortable position in the rear.

The daintiest and most exalted mistress of a house must be ready to enter and conquer the darkest corner of kitchen or laundry before she can be supreme.

There are not wanting indications that the spirit of social advancement is rising to meet and conquer the present evils menacing home and family life; the three sides of the problem, the social, the economical and the mechanical, have concentrated upon them much of the best thought of the present time. The solution of this, as of all our problems, is found in the word "Education."

NEWSPAPERS AND QUACKERY.

It is possible that experience covering the next half century or more may teach a lesson to many who have so little regard of their own sweet lives as to be willing victims of the hold-up itinerant or resident quack.

We usually credit "farmer way-back" with all sorts of weaknesses, and imagine him the easy dupe of all confidence men. True, he is the frequent victim, and yet our farmer friend often displays a degree of astuteness and sharpness that may well astonish his city bred defamer, who, in many cases, is quite as easily victimized. We read recently of a supposedly intelligent farmer couple who were easily taken in by an itinerant "no pay, no cure" gentleman. This couple would doubtless have consulted an attorney of repute to assure themselves that the title to any property the purchase of which was contemplated, were perfect. But as to the genuineness of the goods of the stranger who demanded no cash until cured, but received in lieu thereof simply a negotiable promissory note, ah—who would have the effrontery to suspect or question the honesty of such a pleasant gentleman? A human being was entrusting merely his life, not his purse, to this man of fatherly interest.

It is the old, old story, and yet 'tis more than passing strange

that the thousands of dupes who annually put hard earned cash into thieving hands, fail to make an impression that would reflect itself upon others similarly inclined, and lessen the gold that flows into these godless coffers. So long as newspapers prostitute their reading columns to the greed and dishonesty of advertising quacks, so long as they sully their hands with money obtained by false pretenses and taken from the pockets of the deceived, so long will these luring and nasty advertisements be read and responded to by the ignorant sick. The remedy lies not in seeking redress through the courts for promises of cure that are broken, for these cases are compromised—never fought; nor can the evil tendency be stifled through early teachings. The inherent love of easily gotten gold—the "how" is not questioned—stifles all conscience prickings, and so long as the newspapers are willing to join in the game and lend their aid, so long will this stench that brings a blush to every honest cheek, be emitted, and so long will dupes be found to fill with honest coin dishonest palms. The quacks need no legislative enactments; the subsidized journals that are their spokesmen are the real offenders, for without this fertile soil, the dirty parasites can have no nourishment.

We desire to call the attention of the members of the State Society to this evil, and would suggest that the various County Societies go on record as opposing, in the strongest terms, this pernicious system, with the end that there result a united stand at the next State Medical Society meeting. Possibly in this way something may ultimately be accomplished that will reduce this crime against morality and ethics, this blot upon our sense of decency and honesty.

NEWS ITEMS.

Tuberculosis Commission Appointed—President F. E. Walbridge has appointed the following commission to represent the State Medical Society at the next meeting of the National Tuberculosis Congress to be held in Washington, April, 1905: J. W. Coon, Milwaukee; J. D. Cutter, Tomahawk; C. A. Harper, Madison; T. L. Harrington, Milwaukee; O.T. Haugen, Grand Rapids; Wm. Jobse, Milwaukee; G. J. Kaumheimer, Milwaukee; T. J. Redelings, Marinette; G. E. Seaman, Milwaukee: U. O. B. Wingate, Milwaukee; L. F. Bennett, Beloit; G. T. Dawley, New London; Carl Feld, Watertown; J. F. Ford, Omro.

"The Law and the Doctor"—The Arlington Chemical Company has issued and sent to physicians the first volume of two booklets entitled "The Law and the Doctor," "a compilation of the fundamental legal principles

governing the relation of the physician to his patients and the community at large." The first volume treats of "The Physician's Civil Liability for Malpractice." The second is entitled "The Physician as a Witness."

That these brochures will find many grateful readers, goes without saying, and having this valuable information in such compact form will doubtless be a means of encouraging many physicians to read that which otherwise would not come to their notice. The Arlington Chemical Company is to be congratulated upon the happy thought of supplying physicians gratis with this very useful compendium.

The Wisconsin Medical Union of Physicians and Surgeons has been incorporated by H. A. Griffiths, F. A. Wright and R. P. Hanson, with headquarters at Oshkosh, for the purpose of protecting the members in their "natural and legal rights" from "oppressive and unjust laws", and to secure the enactment of laws which shall be "liberal and just." As the names of the above gentlemen do not appear in Polk's Directory, 1900, we presume that they are "irregulars" who have felt the chastening effect of our medical laws.

The Edgewood Farm— The buildings of Mr. F. A. W. Kieckhefer's model dairy farm at Pewaukee Lake, Wis., are nearing completion, and it is expected that the distribution of certified milk will begin in October. This will be the most modern and complete establishment of its kind in the United States, and will amply repay a visit of inspection by all persons interested in the subject of pure milk.

Dr. W. C. Bennett, for the past ten years connected with the Health Department of Milwaukee, has resigned the office of Registrar of Vital Statistics. During his term of office Dr. Bennett has established a reputation as an efficient and faithful officer, and as such has gained much popularity in the medical profession. After some months of post-graduate study Dr. Bennett will engage in the practice of medicine at Oregon, Wis.

The Milk Commission of the Milwaukee Medical Society held a meeting on September 8th, and appointed Dr. Frank E. Darling, of Milwaukee, as bacteriologist, and Dr. A. S. Alexander, of Madison, as veterinary inspector to the Commission. Dr. W. C. Bennett resigned from the Commission on account of his leaving Milwaukee.

Dr. John M. Evans, of Evansville, Wis., died August 23d, at the age of 83. Dr. Evans had been actively engaged in practice at Evansville since 1846. He took an active interest in public affairs, was the first mayor of Evansville, and was twice elected a member of the Legislature.

The Milwaukee Children's Hospital Depots for the distribution of modified milk among the poor children of the city, are in successful operation and are being largely patronized.

The Kenosha Hospital Association has received $12,000 from leading citizens for the purpose of establishing an Emergency Hospital. A site has been selected and the institution will be opened shortly.

Dr. D. J. Hayes, of Milwaukee, has been appointed Consulting Surgeon to the Wisconsin Veterans' Home, Waupaca.

Dr. J. F. Richards, of Tomah, died September 3d, at the age of 87 years.

THE STATE MEDICAL SOCIETY OF WISCONSIN.

ORGANIZED 1841.

Officers for 1903-1904.

F. E. WALBRIDGE, Milwaukee, President.
JAMES MILLS, Janesville, 1st Vice-Pres. C. C. GRATIOT, Shullsburg, 2nd Vice-Pres.
CHAS. S. SHELDON, Madison, Secretary. S. S. HALL, Ripon, Treasurer.

Provisional Councilors.

1st Dist., J. G. Meachem, - - - - Racine.
2nd Dist., J. S. Walbridge, - - - - Berlin.
3rd Dist., C. S. Smith, - - - - - Elroy.
4th and 5th Dist., G. A. Kletzsch, - Milwaukee.
6th Dist., H. Reineking, - - - Sheboygan.
7th Dist., W. T. Sarles, - - - - Sparta.
8th Dist., J. F. Pritchard. - - Manitowoc.
9th Dist., T. J. Redelings, - - Marinette.
10th Dist., J. M. Dodd, - - - - Ashland.
11th Dist., E. L. Boothby, - - - Hammond.

Next Annual Session, Milwaukee, June, 1904.

The Wisconsin Medical Journal, Official Organ.

SOCIETY PROCEEDINGS.

ORGANIZATION NOTES.

In this year of reorganization and transition from the old to the new ways, many new questions arise, and new problems have to be solved. In considering them, it is well to arrive at a common understanding as to the wisest and best methods to pursue, and agree upon a uniform action in the different County Societies.

The financial question is worth considering. We all believe that a sound financial basis is one of the prime conditions of success in any undertaking. In both State and County Societies we should have, at all times, sufficient funds to carry on our work efficiently. With our plan of reorganization complete and successful, this will be a burden to no one. In fact it will be far less expensive than under the old plan when the expense was met by comparatively few. But the new machinery will be more complete and difficult to manage. We shall have 50 to 60 county treasurers whose duty it is, year by year, not only to collect funds for their own societies, but for the State Society as well. To carry our affairs to a successful issue it is necessary that we adopt sound and sufficiently strict business-like methods from the start. The financial relation of the County to the State Society should

be clear in all our minds. For the present the only financial obligation of the County to the State Society is a yearly assessment of $2.00 for each member. When all the Counties are organized it will probably be much less than $2.00.

According to our constitution this assessment is to be sent by all the county secretaries to the secretary of the State Society between April 1st and 10th of each year. Of course each County Society will decide for itself what shall be its own admission fee and yearly dues. Some confusion exists as to just what is expected from the County Societies during the present year, or until the regular assessment next April. First, it was agreed at the last meeting of the State Society that those who were members at that time should pay this year the usual dues of $3.00 directly to Dr. Hall, the state treasurer. Accordingly, so far as State Society dues are concerned, nothing more will be asked of them till the 1904 assessment. As to charter members of County Societies who are *not* already members of the State Society, it has been thought best that $2.00 for each such charter member should accompany the application for a charter. This works no injustice since such charter members pay less than those subsequently admitted, from whom an admission fee is required. Moreover, the $2.00 represents not only the admission fee to the State Society—previously $5.00—but also the dues to the State Society to Jan. 1, 1904. This entitles them to the official organ of the society, THE WISCONSIN MEDICAL JOURNAL, from the date of the application to April 1, 1904. Not only is this plan best financially for the State Society, but from the standpoint of the individual it is well worth the money. Otherwise, these new members, unless they subscribe individually, would be deprived of the inspiration and information to be gained by reading the JOURNAL, and be delayed all these months from getting into the spirit of the movement. Inasmuch as the JOURNAL is the only medium of communication with the members of the society, it would be very unfortunate—as it is unnecessary—that the large body of new members should not receive it till after the next meeting. The amount asked for from each is small, and should keep no one out of the society who really wishes to join. If this plan is best let us all accept it and heartily enter into the arrangement. (C. S. S.)

MINUTES OF THE FIFTY-SEVENTH ANNUAL SESSION OF THE STATE MEDICAL SOCIETY OF WISCONSIN, 1903.

The Fifty-seventh Annual Meeting of the State Medical Society of Wisconsin was held in the Plankinton House Arcade, Milwaukee, June 3d, 4th, and 5th, 1903.

The meeting was called to order at 11:25 a. m., by the president, Dr. John V. R. Lyman of Eau Claire.

The proceedings were opened with prayer by Rev. W. A. Smith, of Milwaukee.

THE PRESIDENT: As the Mayor or his representative is not here at present to deliver the Address of Welcome, we will next listen to the report of the Chairman of the Committee on Arrangements.

DR. U. O. B. WINGATE, OF MILWAUKEE—*Mr. President and Members of the Society.* Your committee on arrangements has been laboring under some difficulties, inasmuch as we were not certain of the exact number that would be present. We supposed there would be a large meeting but thought that this room would be the most satisfactory of any that we could find to meet in, and we hope that it may prove so.

In regard to the railroad transportation I would state that arrangements have been made for one and one-third rates for those who have procured certificates from the agents at home, and it is essential that these certificates be deposited with the agent who will be here shortly, as early in the session as possible. It will be necessary, of course, to have 100 to get the reduced rates.

On Wednesday evening from 8:30 to 11, there will be a smoker given by the Milwaukee Medical Society at the library rooms, located on the eighth floor of the Goldsmith building, corner of Wisconsin and Jefferson streets, opposite the Hotel Pfister. All are cordially invited to be present, and I am requested to say that there will be something besides "smoke," and we hope that everyone will be present.

On Thursday afternoon Mrs. Wingate will be at home to the ladies of the members of the Society from 3 to 5 o'clock, at 204 Biddle street. This reception is for the ladies of the resident members as well as for those residing out of the city. It is informal and all ladies accompanying the members and those in the city are earnestly invited to be present.

The banquet will be given at this hotel, Thursday evening, at 8:30 o'clock sharp. A reception by the president and officers of the Society, with their ladies receiving, will precede the banquet, being given at 8 o'clock in the Colonial room of the hotel. Members are requested to procure their tickets for the banquet at once. There will be some one here to sell them, so that you can get them immediately; for it is essential that the number should be ascertained as soon as possible. The manager is very anxious to have us give him the exact number as near as possible to-day, so everyone will please purchase his ticket as early as possible.

Dr. D. J. Hayes will give a surgical clinic at St. Joseph's hospital at 7 a. m. sharp, Thursday, when he will demonstrate the operation of prostatec-

tomy. Dr. A. H. Levings will also give a surgical clinic at the same place Friday morning at 7 o'clock sharp, and all members are invited to be present.

Members of the Committee of Arrangements may be known by a red ribbon in the buttonhole of the lapel of the coat, and if you have not anything in your possession, and wish it, please touch the button and we will endeavor to give you such information as we can at any time.

THE PRESIDENT: Dr. T. J. Redelings being absent, the report of the Committee on Reorganization, by Dr. J. F. Pritchard, will be presented.

I will state that the Mayor will be here to give the Address of Welcome at 2 o'clock this afternoon. We will now listen to the Report of the Committee on Reorganization. Dr. J. F. Pritchard is the Chairman of the Committee.

DR. PRITCHARD: I suppose it is best that we have a reading of the whole constitution and by-laws, as recommended by the Committee. It was the intention to have a copy in the hands of every member of the society, but by some mistake made in Chicago, only a part of the order reached the Secretary, and many members have not received a copy.

The constitution and by-laws as recommended by the Committee were then read.

During the reading the chairman said that the committee had made the following changes:

Owing to a typographical error, page 10, article 6, line 3, 10 should be read for 12.

Page 12, section 4, strike out last two lines and two words of third line from end, and insert "A new society shall be formed by the authorities of the State Association."

Page 13, section 11, fourth line from end insert "Major" before "fraction."

DR. HERMAN REINEKING, of Sheboygan: I move that the following resolution be adopted:

"Resolved, that immediately after the opening of each forenoon and afternoon meeting, an opportunity shall be given for the interjection of new business, all such business to be referred without debate to a committee of five members, to be appointed by the president, such committee to report and make its recommendations on such matters for final action of the Society at the opening of the next following meeting, or as soon thereafter as practicable."

I make this motion in order to avoid the rush on Friday. Heretofore almost all the new business has been transacted hastily, often without proper deliberation, at the business session on Friday, and it seems to me that if any new business is to be transacted it should be

done deliberately and when it can best be digested and looked into by the Society. These in brief are my reasons for offering this resolution.

Motion carried.

The Society then adjourned till 2 p. m.

June 3d, 1903—Meeting called to order at 2:20 p. m. by the President.

THE PRESIDENT: A resolution was passed this morning in which it was requested that the President appoint a committee of five to which all new business coming up before the Society should be referred and that at the opening of each session of the Society new business to come before the Society should be announced. That committee will consist of Dr. P. H. McGovern, Dr. W. H. Washburn, Dr. W. T. Sarles, Dr. J. F. Pritchard and Dr. Herman Reineking.

DR. OVIATT, of Oshkosh: I would like to make a motion that the Report of the Committee on Reorganization be accepted, to take effect at the end of this year's meeting.

Motion seconded by Dr. Burgess.

DR. REINEKING: I wish to ask for information. Does the passing of this motion imply that the report is now adopted and is to take effect at the end of this meeting, or does it mean that the report if adopted will take effect at the end of the last session of this year's meeting?

THE PRESIDENT: The motion was made that the report be accepted and take effect at the end of this year's meeting.

DR. S. S. HALL: I am not opposed to the report in any way, except in one respect. The only objection I have to that report is the change of name that substantially wipes out of existence the State Medical Society of Wisconsin. The Territorial Medical Society of Wisconsin was legalized by the territorial legislature, and in the first statutes of the State of Wisconsin, published in 1849, the name "The State Medical Society of Wisconsin" was adopted and that law has been renewed in every revision of the statutes that has since been published; and in the revision of 1898, section 1430, the name of the State Medical Society of Wisconsin is given. The name is not "Wisconsin State Medical Society," as unfortunately has been printed on the back of our transactions for a number of years, but "The State Medical Society of Wisconsin," which has a legal status under the laws of the state, by that name; and in that name can own property, can sue and be sued; is not only incorporated, but is actually put on that

standing by the laws of the state. Now how this Society can adopt a new name without any act of the legislature, I do not know. I do not know what legal complications we may become involved in by adopting this and changing the name. There are a great many legal questions that may come up, and I see no reason why the name of the Society should be changed. We have an honorable name which has always stood well among the respectable members of the medical profession and among many other people in the state, and I see no reason for making any change in the name.

DR. REINEKING: I understand that the President in his address will have something to say in explanation of the proposed changes, and I am also glad to see that Dr. Simmons, Secretary of the American Medical Association, is here to-day, and can probably give us considerable light in regard to what the reorganization has accomplished in other states, and I would, therefore, move that this matter of the Report of the Reorganization Committee be made a special order of business to be taken up immediately after the President's address this afternoon.

Motion carried.

DR. STEELE, of Oshkosh, (Chairman of the Board of Censors): The Board of Censors meets the same trouble concerning the admission of applicants to the State Society, at every session, and a special vote has been taken, I think, at every session to overcome some of the difficulties. Some of the applicants come with diplomas and think they are furnishing all that is necessary for membership; but our requirements demand the presentation of a certificate from the State Board of Examiners. We have at present here a man who has tried three different times to obtain admission to the Society. He is without his certificate from the State Board; he has his diploma here, has been practicing in Racine, and the question is, whether the Society is willing to receive him and others under these circumstances. Some have one and some the other.

DR. MISHOFF, of Milwaukee: I believe that last year it was left to the board to make inquiries of the State Board, and if they received a satisfactory answer that the man had certificates, it was accepted as though the certificate was here.

DR. STEELE: Last year somebody had a copy of the list of all licentiates, but we have no such copy to refer to. I don't know where one can be had.

THE PRESIDENT: Is there any one here who can give Dr. Steele the list about which he inquires?

DR. HILL, of Milwaukee: I would suggest that as the Secretary of the State Board is in Milwaukee, the applicant apply to him for a statement that he is registered, which would be deemed sufficient evidence of his being a duly registered physician, and I move that such statement from the Secretary of the State Board be deemed sufficient evidence.

Motion carried.

THE PRESIDENT: Dr. Redelings, Chairman of the Program Committee, is present this afternoon, and we will now listen to his report.

DR. REDELINGS: I have no formal or written report, I have simply a few remarks to make with reference to the work of the Program Committee.

The first meeting of the Committee was called September 3, 1902, at which time resolutions were adopted inviting volunteer papers from all members of the Society, which should be presented to the respective chairmen of the various sections before the first of February, 1903. Notices were sent to the members by the Secretary of the Society, and in response to that invitation we received 13 papers. On the 3d of February another meeting was held, at which time these papers were acted upon, and the balance of the program provided for by invitation. It was decided to have 30 papers, and the Program Committee did considerable work to fill in the program, as that was rather a late date. We submit to you the program and trust that it will be both entertaining and instructive, and that it will meet the approval of the Society. It is as follows:

ORDER OF PROCEEDINGS.

Wednesday, June 3, 1903—Morning Session, 11:00 o'clock.

Call to Order by the President—J. V. R. Lyman.
Invocation—Rev. W. A. Smith.
Address of Welcome—Hon. David S. Rose, Mayor.
Response by the President of the Society.
Report of Chairman of Committee of Arrangements—U. O. B. Wingate.
Report of Chairman of Program Committee—T. J. Redelings.
Report of Committee on Reorganization—J. F. Pritchard, Chairman.

Wednesday Afternoon—2:00 o'clock.

PAPERS.

1. Hemorrhage into the Cranial Cavity following Injury to the Skull, Chas. H. Lemon, Milwaukee.
   Discussion opened by A. J. Burgess and W. H. Earles, Milwaukee.
2. Retrodisplacement of the Uterus, G. A. Kletzsch, Milwaukee.
   Discussion opened by A. J. Puls and F. Shimonek, Milwaukee.
3. The Scientific and Practical Value of Bacteriological Examinations of the Blood during Life, L. Hektoen, Professor Pathology, Rush Medical College, Chicago.
   Discussion opened by Prof. J. B. Herrick, Chicago.

4:00 o'clock.

The President's Address, J. V. R. Lyman, Eau Claire.

4. Management of the Mother during Child-bed Period, A. D. Gibson, Park Falls.
   Discussion opened by H. B. Tanner, Kaukauna, and G. E. Baldwin, Dartford.
5. The Diagnosis of Hysteria, Hugh T. Patrick, Associate Professor Clinical Neurology, Northwestern University Medical School, Chicago.
   Discussion opened by W. F. Becker, Milwaukee, and Richard Dewey, Wauwatosa.
6. Shortcomings of the Physician, particularly in his Relation to the State and Hygiene, Albert F. Fuchs, Loyal.
   Discussion opened by Ralph Elmergreen and J. W. Coon, Milwaukee.
7. The Sequelæ of Adenoids, C. D. Conkey, West Superior.
   Discussion opened by H. B. Hitz and J. S. Barnes, Milwaukee.
8. Indigestion; a few of its Causes and a few of its Effects, H. B. Sears, Beaver Dam.
   Discussion opened by Geo. M. Steele, Oshkosh, and Lorenzo Boorse, Milwaukee.

Smoker by the Milwaukee Medical Society at the rooms of the Society in the Goldsmith Building at 8:30 o'clock.

Thursday Morning, June 4.—9:00 o'clock.

9. Semilunar Cartilages, their Anatomy and Surgery, H. A. Sifton, Milwaukee.
   Discussion opened by A. H. Levings, Milwaukee, and R. H. Jackson, Madison.
10. The Lymphatic Constitution, Walter H. Sheldon, Madison.
   Discussion opened by W. D. Shelden, Reedsburg, and Wm. Thorndike, Milwaukee.
11. Immunity and its Relation to Surgical Pathology, J. M. Dodd, Ashland.
   Discussion opened by J. M. Beffel, Milwaukee, and W. T. Sarles, Sparta.

10:00 o'clock.

The Annual Address in Medicine. The Diagnosis and Treatment of Nephritis, Arthur R. Edwards, Professor Therapeutics, Northwestern University Medical School, Chicago.

12. The Doctor's Suffrage, Ralph Elmergreen, Milwaukee.
   Discussion opened by A. F. Fuchs, Loyal, and A. J. Hodgson, Waukesha.
13. Ethyl Chloride as a General Anesthetic, Franz Pfister, Milwaukee.
   Discussion opened by John Madden, Milwaukee, and W. F. McCabe, Beloit.
14. Post-mortem Degeneration of the Pancreas, Wm. F. Becker, Milwaukee.
   Discussion opened by Herman Reineking, Sheboygan, and A. Gunderson, La Crosse.
15. The Practice of Obstetrics, E. F. Fish, Milwaukee.
   Discussion opened by James S. Reeve, Appleton, and J. F. Ford, Omro.

Thursday Afternoon, 2:00 o'clock.

16. Prostatectomy, T. W. Nuzum, Brodhead.
   Discussion opened by A. H. Levings, Milwaukee, and Wm. Mackie, Milwaukee.

17. Significance of Perforating Wounds of the Eye-ball, J. A. Bach, Milwaukee.
    Discussion opened by F. T. Nye and Gilbert E. Seaman, Milwaukee.
18. Albuminuria in the Apparently Healthy, W. H. Washburn, Milwaukee.
    Discussion opened by C. E. Albright and Stanton Allen, Milwaukee.

4:00 o'clock.

The Annual Address in Surgery. Surgery of the Stomach, Dr. Wm. J. Mayo, Rochester, Minn.

19. Diagnosis and Treatment of some of the Inflammatory Conditions of the External Ear, Gilbert E. Seaman, Milwaukee.
    Discussion opened by N. M. Black and J. A. Bach, Milwaukee.
20. Compound Fracture of Lower End of Humerus, W. H. Palmer, Janesville.
    Discussion opened by B. C. Brett, Green Bay, and W. F. Malone, Milwaukee.
21. The Early Treatment of the Infant, Bertha E. Thomson, Oshkosh.
    Discussion opened by J. R. Barnett, Neenah and G. M. Steele, Oshkosh.
22. Strangulated Hernia, P. R. Fox, Madison.
    Discussion opened by W. W. Gill, Madison, and George W. Fox, Milwaukee.

The Anniversary Banquet will be held at 8:30 o'clock at the Plankinton House. Reception in Hotel Parlors at 8:00 o'clock.

Friday Morning, June 5, 9:00 o'clock.

23. Septal Deflections: their Significance and Treatment, F. T. Nye, Milwaukee.
    Discussion opened by G. E. Seaman and Nelson M. Black, Milwaukee.
24. The Depurative Functions of Organs, W. E. Fairfield, Green Bay.
    Discussion opened by R. C. Brown, Milwaukee, and Julius Noer, Stoughton.
25. Myomectomy of Uterine Fibroids, A. J. Puls, Milwaukee.
    Discussion opened by Edward Evans, La Crosse, and G. D. Ladd, Milwaukee.
26. Surgical Progress, W. H. Earles, Milwaukee.
    Discussion opened by C. W. Oviatt, Oshkosh, and J. A. Jackson, Madison.
27. Manifestations of Rheumatism in Infancy and Early Childhood, Arthur T. Holbrook, Milwaukee.
    Discussion opened by L. Boorse and A. W. Gray, Milwaukee.
28. Diabetes, W. H. Neilson, Milwaukee.
    Discussion opened by Chas. Gorst, Baraboo, and L. F. Jermain, Milwaukee.
29. Cesarian Section, J. C. Cutler, Verona.
    Discussion opened by C. W. Oviatt, Oshkosh, and W. H. Sheldon, Madison.

BUSINESS.

Annual report of Treasurer.
Annual report of Secretary.
Report of Committee on Ethics.
Report of Special Committees.

Report of Committee on Reorganization of the Society.
Election of Officers.
Selection of next place of meeting.
Introduction of President-elect.
Adjournment.

THE PRESIDENT: Dr. Beffel wishes to make an announcement in regard to the pathological exhibit.

DR. BEFFEL, of Milwaukee: Last year the Chairman of the Committee on the Pathological Exhibit gave you something of an address on the subject of Pathology. I do not propose to do that this year. We have a very excellent program and I do not wish to take up time from its consideration. I simply wish to call the attention of the members of the Society to the pathological exhibit. You will find this exhibit in rooms 101 and 103, back of the club rooms on this floor. These rooms are in an out-of-the-way place unfortunately, and the exhibit is not deserving, so far as its excellence is concerned, of such a place, but should have the best room there is in this hotel; and you will all of you be repaid if you take time to visit that little display. Dr. Wilhelm Becker, Professor of Pathology in the Milwaukee Medical College, has gone to a great deal of trouble, and has spent a great deal of time in preparing his part of the exhibit. He has some beautiful specimens along various lines that will interest many of you. The Wisconsin College have put their pathological exhibit at the disposal of the Society, and are here ready to demonstrate the specimens. Other specimens have been added by individuals to the collection. They do not appear as the collections of the Wisconsin College of Physicians and Surgeons or as a display of the Milwaukee Medical College. These collections have been made at great expenditure of time and pains, and they must not be looked upon simply as the advertisements of these individual colleges; but they represent the work of men who are enthusiastic along the lines of pathology.

There is also connected with the display an exhibit that will not only be interesting, but very instructive to all of us in the study of regional anatomy; I refer to serial sections of bodies that have been preserved in formalin, and which have been made by Drs. Sifton and Sayles of this city. These sections are beautifully done and reflect great credit on the skill of these gentlemen, and will certainly prove very instructive to any of you who care to visit the exhibit. There will always be some one in the rooms to show you the specimens and to answer any questions in connection with the pathological exhibit; so we invite you to that exhibit.

THE PRESIDENT: We will now proceed with the program. The

first paper is "Hemorrhage Into the Cranial Cavity following Injury to the Skull," by Dr. Charles H. Lemon, of Milwaukee.

The paper was then read, and, after discussion, was, on motion, referred to the Committee on Publication.

Dr. G. A. Kletzsch, of Milwaukee, then read a paper on the subject of "Retrodisplacement of the Uterus." Paper discussed and referred.

The President then delivered the Annual Address.

During the reading of his Address the President said: Since the recommendation of the new constitution and by-laws to be adopted by the state societies by the American Medical Association at their Saratoga meeting last June, 22 states have organized and are now going on with the good work.

THE SECRETARY: I would like to offer an amendment to article 15 of the Constitution, in accordance with the suggestion of the President in his address. I move that the article be amended so that the latter part shall read as follows:

"Provided, however, that by a unanimous vote of 30 or more members present at any annual meeting, this Constitution may be amended or repealed and articles added thereto, without such previous notice."

Motion unanimously carried.

THE PRESIDENT: I think a motion was made at the beginning of this session which was afterwards reconsidered, to take up the Report of the Reorganization Committee after the address of the President. As we now have amended our Constitution, it is not necessary for this to lie over for one year as it was previously, and we can proceed to consider the report of the Reorganization Committee.

A motion was made and carried that the consideration of the report of the Reorganization Committee be postponed until after the reading of Dr. Hektoen's and Dr. Patrick's papers.

Dr. L. Hektoen, Professor of Pathology, Rush Medical College, Chicago, then presented an address on "The Scientific and Practical Value of Bacteriological Examination of the Blood During Life." The paper was discussed and referred to the Committee on Publication.

DR. C. W. OVIATT: I move that the Society tender a vote of thanks to Dr. Hektoen and Dr. Herrick for the valuable addition to our program this afternoon.

Motion seconded and unanimously carried by a rising vote.

Dr. Hugh T. Patrick, Associate Professor of Clinical Neurology, Northwestern University Medical School, Chicago, then read a paper on "The Diagnosis of Hysteria." Paper discussed and referred.

A motion was made that the thanks of the Society be given to Dr. Patrick for his kindness in giving a practical demonstration of this most perplexing trouble, hysteria.

Motion unanimously carried by a rising vote.

The Board of Censors here made a report, and the names of applicants for admission into the Society were ordered posted, according to the rules. (For list of new members reported at this time and subsequently, see end of these minutes.)

THE PRESIDENT: In accordance with the motion heretofore made, we will now take up the subject of reorganization, and I will ask Dr. George H. Simmons, Secretary of the American Medical Association, to address you.

DR. SIMMONS: Mr. President and Gentlemen:—I hardly expected to talk on this matter; I told Dr. Lyman if there was any discussion on this question of adopting the Constitution which is before you for consideration, that I would be glad to speak, if the discussion called for anything from me, and I do not feel like taking your time, and I shall speak very briefly.

The subject of organization you have all read about, and if I should talk to you for an hour I would be merely repeating what all of you have heard time and again, for it is in the air.

I want to say a word, however, in relation to one or two points: The first that I want to call your attention to is that of uniformity of organization. In reading over the history of the matter in the transactions of the American Medical Association, we find that on three different occasions, the last of which was in 1887, the American Medical Association has appointed committees on organization, and each of these committees agreed on practically the same recommendations, that is, the adoption of the county society plan of organization, and a uniformity on the part of the state societies so that the county could be federated in the state society, and the latter in the American Medical Association. When the committee was appointed at Atlantic City three years ago, it brought in the same report, but it took notice of what had occurred in the past, *viz.*, that while these reports were adopted, that ended the matter. Our committee realized that we must carry out the ideas recommended, and hence, when it reported at St. Paul, it recommended that a committee on organization be continued to carry out the recommendations.

In the past our state societies were a kind of patchwork, scarcely any being organized alike. The committee, therefore, took up the question as to how we could get this uniformity; and decided that the

only thing to do was to get up a constitution and by-laws that would apply everywhere. One member of the committee went to Alabama and studied the plan there, which is ideal. It examined the Massachusetts plan, the Pennsylvania plan, and others, and finally combined the best there was in all. It recommended a standard constitution and by-laws for state societies, which, as your President stated, was adopted by the American Medical Society at Saratoga, and recommended for adoption to all the state societies.

In the past each state society has been going by itself without any regard to what other state societies have been doing. We want state societies to co-operate in many things. It is not necessary for me to state them, although I might say that in this question of medical legislation, reciprocity and various things come up where each individual state can do nothing, but combined can do a great deal.

This constitution is not new. Massachusetts has had the county plan, although upside down, for over a hundred years; Connecticut has had the plan for over a hundred years; Alabama has had the plan for 33 years; Pennsylvania has had it for a goodly number of years, and they all find it is *the* plan. They would not go back to the other under any circumstances. The President told you that 22 states have already adopted this plan, and 11 have adopted it this year, and those state societies that adopted it last year and that have had a meeting since its adoption, have been very enthusiastic in their reports of the splendid results obtained from it. I got a letter only this morning from the secretary of the Arkansas State Society calling attention to what some of you may have seen has occurred. The fact that they succeeded this year in getting the legislation they wanted, a thing that they never succeeded in doing before—in fact they have not been able to get any legislation at all—the fact of their success this year, I say, they admit was brought about because the profession was united. In Tennessee they had their first meeting after the adoption of the constitution, week before last, and they had increased their membership enormously, and every state that has adopted this constitution has increased its membership remarkably.

The principle is simply this, that membership in the county society carries with it membership in the state society; and that many individuals pay a little while the few do not have to pay it all, as has been the case in the past. It means instead of a third of you paying $3 a year, we want three-thirds of you paying a dollar each.

I want to say in regard to district societies, because this matter came out in the President's address and because I heard some one objecting to the fact that certain districts societies would want to keep

up their existence, that we have provided for district societies. These councilor districts can be made to cover the territory covered by the district society, if the district has any territory, but you will find that these district societies do not cover any particular territory; they cover half a dozen or more counties and have in fact no boundaries, and this is one of the objections to district societies in the past, and to tri-state societies and semi-national societies. They go here, there and everywhere, and cover no particular territory, and that has been one of the weak points in our organization in the past.

Some one suggested that if the Lord's Prayer were brought before us, objection would be offered to it; and some will object to the constitution and by-laws prepared by the American Medical Association. There are one or two little things I think I could improve, and yet, gentlemen, I think it is pretty near as good as any of us could get up at first trial, and if we find that this does not work as time goes along, it is very easy to change it.

Dr. Fuchs moved that the constitution as recommended by the Committee on Reorganization be adopted.

Dr. Hill: Do I understand the motion is on the adoption of the report of the committee?

Dr. Fuchs: The motion was that the constitution and by-laws as recommended by the committee, be adopted.

Voices: As printed?

Dr. Hill: I would say that there is a slight difference between the motion as it was made and the motion as suggested by some other members on the floor. There is an error in the printing, and the committee made a slight change, and that change was recommended by the Committee on Reorganization.

The Committee on Reorganization sent in the constitution and by-laws, and there was a mistake, which the chairman corrected.

On page 12, section 4, the committee's report is as follows:

"Only one component medical society shall be chartered in any county. Where more than one county society exists friendly overtures and concession shall be made with the aid of the councilor for the district, if necessary, and all the members brought into one organization. In case of failure to unite, a new society shall be formed by the authority of the state association." That is the report of the committee as read this morning, and as adopted by the committee.

Dr. John M. Dodson: I would like to move, if the gentleman does not wish to change his motion, so that it shall read "as printed," that that change be made; that the motion upon which we vote be, to adopt the constitution "as printed," and the reason for that is this:

as Dr. Simmons has said, it is a matter of a great deal of importance that there be absolute uniformity as soon as possible, in the constitutions and by-laws of the several state societies. This constitution, just as printed, has been adopted in 22 states, and I heard yesterday that the constitution was adopted in Illinois, as printed. The change recommended by the committee is very unfortunate, absolutely uncalled for, and would precipitate a great deal of difficulty. It seems to me that if there are any occasions at any time arising, where there is difficulty between two societies in the county, the council is the proper place to take that difference. That is what the council is for, and it seems of more importance, as Dr. Simmons has said, that the constitutions in the several states should be uniform than that variation should be caused by trifling changes in any particular constitution, and I move you therefore to amend the motion as made, unless the mover accepts it, to add the words "as printed."

DR. FUCHS: I accept that so that my motion will read that the report be adopted as printed.

Motion seconded.

DR. HILL: I would further amend that motion by adding the words, that the constitution shall take effect at the close of this meeting.

DR. CURRENS: May I ask for information in regard to that legal opinion as to the name, whether it be Association or Society? I understood from the Attorney-General we could not change our name, and one of the other state organizations had to change its name on account of the Attorney-General's opinion, or at least did so.

THE SECRETARY: I offer the further amendment that the name of the Society shall remain as before, The State Medical Society of Wisconsin. I notice that every state that has adopted this constitution has retained the word "society"; at least it has been so done in Illinois, Michigan and Minnesota, and probably for this reason, that they were incorporated as societies and by changing the name to "association" they lay themselves liable to legal difficulties which are unnecessary. Moreover, there is a sort of sentiment, I think, attached to the name The State Medical Society of Wisconsin, under which we were incorporated 50 years ago.

Seconded.

DR. REINEKING: There is sometimes a little difference of opinion as to the meaning of the word "session" and "meeting." I would like to ask Dr. Hill to define the intent of his amendment, by stating

whether he means at the close of this present afternoon meeting or session, or at the close of the annual meeting or session.

DR. HILL: The intent was that it should be at the close of this annual meeting; that Dr. Lyman shall conduct this society through this meeting as its President and then this new constitution go into effect.

Dr. Sheldon's amendment was carried.

DR. J. M. DODSON: Why would it not be best to have this go into effect at once this afternoon, so that the remainder of the session could be conducted under the new constitution, and preparation made for next year? It has seemed to me, inasmuch as we have cleared the decks, that it would be well to have this constitution go into effect at once.

DR. PRITCHARD: I think Dr. Dodson misunderstands the situation. I do not think we can adopt it except on Dr. Hill's motion. I do not think we can operate under this constitution unless we elect new officers. Dr. Hill's amendment is proper. We also mention in our recommendation that there be a committee appointed to get the machinery in order for the next annual meeting, in place of the council.

DR. HALL: How would it affect the finances of the Society? Some of the members have paid their dues for this year, and if it goes into effect at the end of this annual meeting what will become of the other members who have not paid their dues?

DR. PRITCHARD: They will pay their $3 just the same.

DR. HALL: Very well, if that is the understanding.

THE PRESIDENT: The question is on the second amendment of Dr. Hill, that this new Constitution and By-Laws go into effect at the close of the present annual session.

DR. SEAMAN: I do not think it is quite clear as to whether or not this section 4 of article 10 is to be adopted as it is printed, or as recommended by the committee.

THE PRESIDENT: Dr. Fuchs accepted the amendment that the report of the committee be adopted as printed, and that is the motion before the house now.

Motion unanimously carried.

DR. H. M. BROWN, of Milwaukee: As President of the Medical Society of Milwaukee County, I desire to make the first application to this Society for a charter, in due form.

DR. HILL: I move that the president appoint a committee of ten

with the powers of the Council of the new Society, to act as an Organization Committee for the State of Wisconsin for the ensuing year.

Motion seconded.

THE SECRETARY: I think it would be preferable to have this committee act in place of the House of Delegates—the House of Delegates is the body upon which devolves the appointment of the ten councilors of the state, and certain other duties.

DR. PRITCHARD: That is provided for. The committee could not act as House of Delegates. The House of Delegates will be in order for the next annual session. In 1904 the House of Delegates will be properly formed. This committee is merely to act to get the machinery in working order and then the House of Delegates elect the councilors at that time.

THE SECRETARY: But it is important that the council should be appointed at once. The appointment of the House of Delegates depends upon the organization of the different counties in the state and the different counties in the state are to be organized by the Council.

DR. PRITCHARD: As nearly as may be the idea is that the President shall select this committee from over the state to represent the state and have at least as many as the Council will be when elected by the House of Delegates next year---that was the intention and it seemed to us, after we had given the matter a good deal of attention, that it was about the only way that we could get along and work smoothly.

THE SECRETARY: Who in the meantime will do the organization necessary this year?

DR. HILL: I would like to say in regard to this motion, that the chartering of societies is left to the Council, and that the Councilors are the ones to organize the state into societies. When that body is duly organized this committee of ten is to be appointed with all the powers of the Council, which is practically a temporary Council to act during the year with the powers of that body, and so we will have then, when the President makes his appointments, a Council to act for one year, until we are thoroughly organized.

THE SECRETARY: If it is appointed with that distinct object in view, and the several Councilors shall be residents of each Councilor district and shall be practically in place of the Council, I think that would be all right.

DR. HILL: That is included in the motion.

DR. SEAMAN: I move as an addition to Dr. Hill's motion that

the incoming President of the Society, Secretary and Treasurer of the Society, be *ex officio* members of that proposed Council.

DR. HILL: I would not accept that for this reason, because we do not know who these officers may be, and they may be from one locality, and in selecting these the President would be obliged naturally to select people from the various districts in the state, and if such officers were properly distributed I would have no objection to that amendment, but if they were not, it would be wise to restrict the President in his selection of these people, as they would necessarily have to be people particularly adapted to this work of organization at this time, and properly distributed over the state.

THE SECRETARY : By the constitution the President and Secretary are *ex officio* members of the Council already.

DR. SEAMAN: I thought the Treasurer ought to be added so that the financial affairs of the Society in the performance of the business of the year, shall be well considered in the meetings of this Council and I think he ought to be *ex officio* a member of the Council.

Amendment seconded.

DR. SEAMAN: All the officers, the President, Secretary and Treasurer, are to be *ex officio* members of this committee. By the constitution the President and Secretary are *ex officio* members of the committee when the Society is thoroughly organized.

Would it not be well to simply add those officers to the ten who make up the committee?

DR. HILL: If they are addition to the ten, I accept the amendment.

DR. SEAMAN: That is what I mean.

Motion as amended unanimously carried.

The Society then adjourned until Thursday, June 4, at 9 o'clock a. m.

Thursday, June 4, 1903, 9 a. m. Proceedings resumed. Society called to order by the President.

Dr. A. D. Gibson, of Park Falls, read a paper on "Management of the Mother During Childbed Period." Paper discussed and referred.

THE PRESIDENT: I wish to state that we are behind with our papers, and that the discussion of the papers until such time as we shall be caught up, will be limited entirely to those who are given on the program for discussion.

The next paper we will listen to is the paper on the subject of "The Shortcomings of the Physician, Particularly in His Relations to the State and Hygiene," by Dr. Albert F. Fuchs, of Loyal.

Dr. Fuchs then read his paper, which was discussed and referred.

Dr. Arthur R. Edwards, Professor of Therapeutics, Northwestern University Medical School, Chicago, then delivered the Annual Address in Medicine, on "The Diagnosis and Treatment of Nephritis."

A rising vote of thanks was extended to Dr. Edwards for his very able and instructive paper.

Dr. H. B. Sears, of Beaver Dam, read a paper on "Indigestion, a Few of Its Causes and a Few of Its Effects." Paper referred.

Dr. H. A. Sifton, of Milwaukee, read a paper on "Semilunar Cartilages, Their Anatomy and Surgery." Paper discussed and referred.

Dr. C. D. Conkey, of West Superior, read a paper on "The Sequelæ of Adenoids." Paper discussed and referred.

Dr. J. M. Dodd, of Ashland, read a paper on "Immunity and Its Relation to Surgical Pathology." Paper referred.

On motion the Society adjourned until 2 p. m.

Thursday, June 4, 1903, 2 p. m. Society called to order by the President. The Secretary read the following communication:

Milwaukee, Wis., June 4, 1903.

To The Wisconsin State Medical Society,

GENTLEMEN: In view of the fact that the publication of the Transactions of your Society in a monthly journal rather than in an annual volume is contemplated, The Wisconsin Medical Journal Co. desires to make the following proposition:

The Wisconsin Medical Journal will undertake the publication of the Society's Transactions including all papers, discussions, business matters, list of members, officers and committees and all other matters pertaining to the affairs of the Society and furnish each member a copy of the Journal monthly at a price not to exceed $1.00 per capita per annum.

The Secretary of the Society will be made Associate Editor of the Journal and will in every way furnish, superintend, control and be responsible for all matters published which pertain to the business and transactions of the State Society. A contract for one year or longer embodying the above ideas together with such other details as may be applicable and desirable, will be made by The Wisconsin Medical Journal Company with the proper officers of your Society.

Respectfully,

M. M. TAYLOR,
Sec'y and Bus. Mgr.

Approved,

F. E. WALBRIDGE,
A. J. BURGESS,
G. E. SEAMAN,
A. J. PATEK,
M. M. TAYLOR,
Directors Wisconsin Medical Journal Co.

DR. SEAMAN: I move that the matter be referred to the business committee appointed yesterday for the purpose of considering new business at this session, and that that business committee be instructed to report at the session Thursday, to-morrow morning, at 9 o'clock.

Motion carried.

Dr. J. A. Bach, of Milwaukee, read a paper on "The Significance of Perforating Wounds of the Eyeball." Paper referred.

Dr. T. W. Nuzum, of Brodhead, read a paper on "Prostatectomy." Paper discussed and referred.

Dr. Wilhelm Becker, of Milwaukee, read a paper on "Post-Mortem Degeneration of the Pancreas." Paper discussed and referred.

Dr. W. H. Washburn, of Milwaukee, read a paper on "Albuminuria in the Apparently Healthy." Paper discussed and referred.

Dr. William J. Mayo, of Rochester, Minn., then delivered the Annual Address in Surgery, on "The Present Status of Surgery of the Stomach."

DR. SIFTON: I move that a rising vote of thanks be given to the doctor for his able paper.

Motion unanimously carried.

THE PRESIDENT: Yesterday afternoon the subject of reorganization was taken up, and the Society voted to adopt the Constitution and By-Laws as recommended for State Societies by the National Association, unanimously. The name of the Society was not changed. It was also at that time resolved that a Committee of ten be appointed who shall act in the place of the Council for the coming year, and that this Constitution and By-Laws shall go into effect at the end of this annual meeting. The President has chosen for that Committee of ten one from each of the Congressional districts throughout the State. They are as follows: Drs. J. F. Pritchard, J. S. Walbridge, G. A. Kletzsch, Herman Reineking, W. T. Sarles, T. J. Redelings, J. M. Dodd, E. L. Boothby, C. S. Smith and J. G. Meachem, Jr.

DR. CURRENS: Gentlemen, I have but a very few minutes of your time to occupy, and all I want to say is in regard to our new medical law which was signed on the 22d of last month. A few words about reciprocity and the licensing of those who hold registration certificates. Under our new law no one can hold a position on the State Medical Board without he is a licentiate of that board. Under the law of 1891 the board had no authority to grant a license to anyone except on examination and the presentation of a diploma from a reputable medical college. We have had it changed on account of so

many not understanding when the registration law went into effect that it did not give those registered the full benefit that a licentiate gets. Under our reciprocity laws, in which we have about ten states now and we expect to have twenty by next fall, no man can get the reciprocal benefits without a license.

Under the act of 1897, the statutory law was that every person that was a graduate of a reputable medical college, and presented evidence of being a person of good morals and a reputable practitioner of medicine, was entitled to a license by making application for such and the payment of a fee of $5. The law as revised with the revision of the statutes in 1898 applied only to those beginning the practice of medicine, and as there were at that time over 2,000 practitioners that were not represented, the board could not keep track of them; so this registration law of 1899 was passed; and under the ruling of the attorney-general the board was ordered to register everybody that was in the actual practice of medicine prior to July 1, 1897, regardless of their holding a diploma or license; but on the face of these registration certificates, or a portion of them, was printed in red letters, that "this is not a license to practice medicine and surgery." In other words, the holding of this registration gave them no legal right as practitioners without diplomas. The law of 1887 gave practitioners rights that had diplomas from reputable colleges. Now under this new law it will be necessary for these persons to return their registration certificates and make application in the regular way, and they will be credited for the amount that is paid for the same when issued, and, as there are over 1,000 of them that are reputable men, the board will be pleased to receive applications at any time and the necessary blanks may be obtained by addressing the Secretary of the State Medical Board at Milwaukee, Wis., Dr. Filip Forsbeck, 121 Wisconsin street.

In regard to reciprocity I want to say that we have a confederation of state medical examining boards that is called a Reciprocating Confederation. They have an old confederation that has been in existence for fifteen years, that has done nothing in the line of reciprocity. At present we reciprocate with Illinois, only with those that have licenses through examination; but that will be changed probably at their next meeting. Those that have licenses based on reputable diplomas will come in; but we reciprocate in both ways with Kentucky, Ohio, one of the Virginias (I am not sure which), New Jersey, Indiana, Washington and Michigan. Iowa and Ohio have joined the association, but there is a flaw in their law and we cannot exchange reciprocity until the legislature corrects the flaw; but in all we have

ten names and have applications for at least ten more that will come in at our meeting in St. Louis October next.

I mention this so that the old members of the profession, these men that stand in the front ranks of this Society that have not licenses, can get such by sending and making application.

THE PRESIDENT: There is brought to my notice the fact that there are eleven Congressional districts and only ten names appear on this list. I will say that it was thought that Milwaukee and Waukesha counties, constituting the Fourth and Fifth Congressional Districts, could be under the care of one Councilor.

It will be necessary for you, upon returning to your homes, to organize your individual county societies. The Constitution and By-Laws provide that no person shall be a member of a State Society unless he comes recommended by his county society in the county in which he resides. For sparsely settled districts provision is made in the Constitution and By-Laws, but no one can hold membership in the State Society, not even the members who are now members, from this meeting on, unless they become members of the county societies in the counties in which they reside. We want that clear, because there has been a great deal of misunderstanding about it throughout the state.

DR. ELMERGREEN: It would be an imposition on the Society to read my paper at this late hour, as there are so many more valuable papers that ought to be read, and I gladly yield precedence to Dr. Pfister, who follows me on the program.

But I crave your indulgence for a moment on another matter. We have to-day received authentic, definite, truthful reports regarding the outrages and murders committed at Kishineff, Russia, from Michael Davitt, whose word is good throughout the civilized world, and I would like to offer a resolution on the subject. A similar resolution was passed in Massachusetts by the State Medical Society, and if you agree with the sentiments expressed, I trust you will vote for it.

"*Resolved*, That the medical profession of the State of Wisconsin, convened in annual session, recognizing that the humane calling of medicine is intimately connected with the social welfare of humanity, and profoundly imbued with the sacredness of human life, condemns the late outrages, murders and rapine committed at Kishineff, Russia, as a heinous crime unparalleled within the history of civilization."

I move that the resolution be adopted.

Motion carried.

Dr. Franz Pfister, of Milwaukee, read a paper on "Ethyl Chloride as a General Anesthetic." Paper discussed and referred.

Dr. Gilbert E. Seaman, of Milwaukee, read a paper on "Diagnosis and Treatment of Some of the Inflammatory Conditions of the External Ear." Paper discussed and referred.

Dr. Bertha E. Thomson, of Winnebago, read a paper on "The Early Treatment of the Infant." Paper discussed and referred.

Dr. B. G. Maercklein, of Milwaukee, then by request gave a clinic on cleft palate. He said:

I have a child here that had complete cleft palate, hard and soft parts, and also hare-lip. The hare-lip was operated on in infancy and the cleft palate operated on very recently. As the patient is about to leave the city in a day or so, I have been asked by members of the Society to show this case to the Society, and I would take this opportunity to exhibit it. You can all see the result of a very successful operation in that class of work, and you can also observe the great benefit that may be given a patient afflicted as this one was. The little patient is about 4½ years of age and the operation performed is the one originally recommended and devised by Dr. Brophy. There is a perfect movable palate and a perfect uvula. If any of you are particularly interested in the case, a subsequent exhibition might be made of it to-morrow.

I exhibit the model of the mouth showing the width of the cleft before the operation was performed.

It is not generally known in the medical profession what can be done in this line, and even in the adult, if the cleft is not too great the parts can be brought together similar to the result in this case. I have operated on a number of adults from 20 to 26 years of age with good results.

On motion the Society adjourned till Friday, June 5, at 9 a. m.

Friday, June 5, 1903, 9 a. m. Society called to order by Vice-President Pelton.

The Committee on New Business, Dr. P. H. McGovern, chairman, was called on for its report, which was presented as follows:

Milwaukee, Wis., June 4, 1903.

To the President and Members of the State Medical Society of Wisconsin,

GENTLEMEN: Your committee respectfully recommend that the appended offer of The Wisconsin Medical Journal Company to publish the Transactions and all other matters pertaining to the work of the Society be accepted, and that the officers and Committee of ten to act in place of Council of the State Medical Society of Wisconsin be authorized to enter into a contract with said company for such publications for the period of one year. And we further recommend that the Wisconsin Medical Journal, for the ensuing year, be considered the official Journal of this Society.

P. H. McGOVERN,
J. F. PRITCHARD,
H. REINEKING,
W. F. SARLES,
W. H. WASHBURN,
Committee.

DR. HITZ: I move the acceptance and the adoption of the report.

Motion unanimously carried.

Dr. F. T. Nye, of Milwaukee, read a paper on "Septal Deflections, Their Consequence and Treatment." Paper discussed and refered.

Dr. H. B. Sears, Dr. J. S. Reeve and Dr. George T. Dawley were appointed by the President a committee to audit the Treasurer's Report.

Dr. E. F. Fish, of Milwaukee, read a paper on "The Practice of Obstetrics." Paper discussed and referred.

DR. CURRENS: There is a matter that should have been brought up before this Society at this time. There should have been a committee appointed to select ten names to recommend to the Governor as persons to fill the vacancies which occur in the board, from the members of this Society. Dr. Bell and Dr. Hitz go out at this time, and I move you that the chair now appoint a committee of five to report ten names before the business meeting this afternoon.

Motion carried.

VICE-PRESIDENT PELTON: The President has handed me the following list of names for that committee: Dr. Seaman, Dr. Sears, Dr. F. E. Walbridge, Dr. Evans and Dr. Pelton, and they will constitute the committee.

Dr. R. C. Brown, of Milwaukee, read a paper on "The Depurative Functions of Organs." Paper referred.

Dr. A. J. Puls, of Milwaukee, read a paper on "Myomectomy of Uterine Fibroids." Paper discussed and referred.

Dr. W. H. Earles, of Milwaukee, read a paper on "Surgical Progress." Paper discussed and referred.

A telegram was then read from Dr. George H. Simmons, Secretary of the American Medical Association, congratulating the Society on the adoption of the new Constitution and By-Laws.

Dr. Arthur T. Holbrook, of Milwaukee, read a paper on "Manifestations of Rheumatism in Infancy and Early Childhood." Paper discussed and referred.

DR. CURRENS: I move that the remaining papers be read without discussion.

Motion carried.

DR. SEAMAN: I would like to make a report as to the committee selected to nominate ten men to be sent to the Governor for the State Board of Medical Examiners. The committee begs leave to report

the following: Drs. Henry B. Hitz, Milwaukee; J. W. Coon, Milwaukee; J. R. Barnett, Neenah; W. T. Sarles, Sparta; J. V. R. Lyman, Eau Claire; Julius Noer, Stoughton; Herman Reineking, Sheboygan; L. F. Bennett, Beloit; Carl Feld, Watertown; Herman Gasser, Platteville.

On motion the report of the committee was accepted and adopted, and the nominations confirmed by the Society.

DR. SEAMAN: I am requested by the chairman of the Committee on Medical Legislation to state that he has been unable to be here during the session, and to simply report that the amendments to the medical law have been printed and can be seen by those who are interested. He has no lengthy report to make.

I am also requested to state that in the furtherance of the work it was necessary to incur some liabilities, and the bills for the same have been handed to the Treasurer. The bills are for counsel fees to Doe & Umbreit, Milwaukee, $85; Dr. J. R. Currens, cash advanced, $47.92; Dr. William Jobse, cash advanced for typewriting, postage, etc., $9.75; to the Wisconsin Medical Journal, for printing, $10. Total $152.67.

I move that the bills be allowed.

Motion carried.

Dr. W. H. Neilson of Milwauke, read a paper on "Diabetes." Paper referred.

Dr. J. C. Cutler, of Verona, read a paper on "Cesarian Section." Paper referred.

The Society then went into business session. The Treasurer, Dr. S. S. Hall, presented his report as follows:

Mr. President and Members of the Society: It gives me great pleasure to announce that for the first time in quite a number of years the State Medical Society of Wisconsin is out of debt. All bills received up to the time of this meeting have been paid, including the deficit of last year of about $180.

TREASURER'S REPORT.

S. S. Hall, Treasurer, in Account with the State Medical Society of Wisconsin:

Debtor.

Cash on hand, as per report June 6, 1902		$1,575 76
Received from admission fees	$350 00	
Received from dues and assessments	1,646 00	
		1,996 00
Total		$3,571 76

Creditor.

C. S. Sheldon, expense	$86 18
C. S. Sheldon, expense	72 65
C. S. Sheldon, secretary, salary 1902-3	200 00
H. G. Razall Mfg. Co., printing	1 40
Saxe Sign Co., 3 card signs	1 00
Hugo Esche, expense pathol. committee	21 10
Guests at banquet, 1902	2 00
Flowers at banquet, 1902	15 00
Standard Printing & Stationery Co., printing	8 25
R. Schrubb, janitor	15 00
State Journal Printing Co., note account, 1901	178 57
Dr. Harvey W. Cushing, expense	75 00
Dr. Simon Flexner, expense	75 00
C. J. Hambitzer, music, banquet, 1902	15 00
W. Rohlfing, hauling piano, banquet	5 00
C. H. Ellsworth, printing, treas	1 00
State Journal Printing Co., account July, 1902	56 50
H. D. Goodwin, stenographer	133 00
State Journal Printing Co., account Transactions, 1902	650 00
State Journal Printing Co., account Transactions, 1902	40 00
State Journal Printing Co., bal. account Transactions	27 17
State Journal Printing Co., printing	16 50
A. Hermes, delivering Trans. Milwaukee	6 50
Dr. Reineking, delivering Trans. Sheboygan	72
C. S. Sheldon, expense	81 16
Postage, exchange and incidentals, treas	42 35
S. S. Hall, treasurer's salary, 1902-3	100 00
Total	$1,926 05
Balance on hand	1,645 71
	$3,571 76

Respectfully submitted,
SIDNEY S. HALL, *Treasurer.*

The Finance Committee then presented its report as follows:

Milwaukee, June 5, 1903.

We, the undersigned Finance Committee have carefully examined the books and vouchers and accounts of the Treasurer and find them correct, and agreeing with the accompanying report.

H. B. SEARS,
J. S. REEVE,
GEORGE T. DAWLEY.

The report of the committee was accepted, adopted and placed on file.

The Treasurer's report was accepted, adopted and placed on file.

The annual report of the Secretary was then read as follows:

SECRETARY'S REPORT FOR 1903.

The Secretary begs leave to submit the following report for the past year:

The Membership as shown in the Transactions of 1901 was 630. That of last year was 677, a net gain of 47 members, accounted for as follows:

Number of members received at last meeting.....75

From which are to be deducted:

Died during the year..... 9
Resigned 3
Dropped for non-payment of dues.....16

Making a total of.....28

Which, deducted from the number of new members, makes a net gain during the year of.....47

This is 15 more than the average yearly increase for the past 10 years.

The removals since the last meeting have been as follows: John F. Brown, Mazomanie, to Waupun; G. W. Balkcom, Clear Lake, to Tower, Minn.; E. A. Beard, Cobb, to Milwaukee; Francis M. Corry, Kellnersville to Menasha; Julian C. Baker, Warren's, to Greenwood; R. B. Hoermann, Hartford, to Watertown; C. M. Gould, Superior, to Tuczon, Ariz.; Wilhelm Lerche, Soldier's Grove, to Eau Claire; Geo. H. McCallister, Elkhorn, to Davenport, Iowa; J. W. Rockwell, Lancaster, to Grand Rapids; B. E. Manchester, Crandon, to Armstrong Center; S. W. Zochert, Fond du Lac, to Hingham; Thomas Miller, Madison, to Oconomowoc; S. M. W. Washburn, Baraboo, to Minneapolis, Minn.

There have been 6 resignations: Mary P. Houck, La Crosse; O. E. Lauson, Milwaukee; Edgar E. Rice, Waukesha; Geo. A. Ritchie, Appleton; Charles E. Sisson, Elgin, Ill.; E. H. Pomeroy, Highland Park, Ill.; the two latter removed from the state.

There are 6 deaths which have not been before reported: Martin R. Gage of Sparta, one of our oldest members; Wm. Eastman, Mineral Point; L. M. Gregory, Stevens Point; James K. Nivin, Ironwood, Mich.; Rush Winslow, Appleton; C. M. Skinner, Hartland.

If there are any omissions or errors in these statistics, the members are earnestly requested to make the corrections, as well as promptly report to the Secretary all changes of residence and other events affecting the membership list which may occur during the year.

PUBLICATION.

The Transactions of 1902 contain 24 papers and make a volume of 490 pages. This is one more paper and 38 pages less than the Transactions of 1901. The contract for printing was given to the State Journal Printing Co. of Madison, the lowest bidder. 825 volumes were printed, and were sent to the members, affiliated Societies, various Libraries, etc. The total expense of publication was $640.26, an average of 77½ cents per volume.

PROGRAM.

The usual Program Committee was appointed by the President, with Dr. T. J. Redelings of Marinette as Chairman. It was thought best to drop entirely the competition plan. In place of it a cordial invitation was given the whole membership to present volunteer papers—the time limit being fixed at Feb. 1, 1903. If at that date sufficient material for the program had not been received, it was stated that special invitations to write papers would be

extended by the various chairmen of sections. Aside from the Annual Addresses there are 29 papers on the program; of these 13 are volunteer papers, and 16 papers by invitation.

Among the matters of interest to the profession of the State during the past year, Medical Society Reorganization holds clearly the first place. The Committee on Reorganization, appointed in 1901, reported a plan of organization at the last meeting. The report was accepted as a report of progress and the Committee continued. Correspondence with numerous members of the society disclosed such a difference of opinion that the chairman of the committee invited a large number of the members of the society most interested to a conference, which was held in Milwaukee early in the year. Dr. MacCormack, the official organizer of the American Medical Association, and Dr. Evans of Chicago, were also present. The unanimous decision of the conference was to adopt the plan proposed by the American Medical Association, with such modifications as local conditions and the experience of other state societies indicated. The report of the committee has been printed in the office of the Journal of the American Medical Association and has been sent to each member of the Society. Probably this report has been already adopted. To observe strictly the Constitution would involve a delay of one year in carrying out its provisions, since we have no House of Delegates nor Council. It is important, however, that this machinery be set in motion at once, especially to promote and hasten the organization of county societies. Apparently the most feasible plan is the appointment of a committee which shall act as the House of Delegates for the year. Their first duty will be to divide the State into Councilor Districts and appoint a Councilor for each. Doubtless our immediate success will depend largely upon the character of this council. It should be composed of the very best men obtainable, with a knowledge of the whole situation, a talent for organization, enthusiasm, as well as a willingness to devote much time unselfishly to the cause. By this plan the systematic organization of county societies can be carried on at once. We now have in the Society representatives from 65 counties in the State, and ought have at least as many county societies before our next meeting. We have several flourishing and successful district societies in the State, and the wish has been expressed that these shall be recognized until such time as the separate counties are organized. For many reasons, however, it seems best to adopt the separate county plan from the start. First, it is the plan adopted by all the other states, and uniformity of action is very desirable. Then, it is less confusing to deal with the counties separately, and we shall be more successful in securing as members all the qualified physicians in the county. Then, too, the recognition of the district societies will tend to delay county organization. There is no valid objection to the continuance of the district societies as independent bodies, if they so elect, and ultimately they may become the *District Societies*, as a part of the plan contemplated in the Constitution.

Up to date the following counties have organized, and ask recognition by the State Society: Ashland, Barron, Brown, Clark, Dodge, Douglass, Fond du Lac, La Crosse, Manitowoc, Marinette, Milwaukee, Outagamie, Ozaukee, Sheboygan, Vernon, Waukesha, Jefferson, La Fayette, Wood and Racine—20 in all.

With the adoption of our new plan of organization there comes a parting of the ways for the State Society. As part and parcel of the great national movement for the unification of the Medical Profession of the Country, it was

inevitable and is bound to be beneficial. The effect it will have upon the future of this Society will depend entirely upon how thoroughly and efficiently the plan shall be worked. In our neighboring States of Michigan and Illinois the plan has worked well. Michigan now has 71 counties organized with a membership of 1,700. A year ago her State Society was smaller than ours. Illinois has 84 counties in line, with a membership of 4,357. If we shall undertake the work with equal enthusiasm and energy, we should at least double our membership before the next annual meeting. If the spirit which has characterized this Society in the past is a criterion, I am sure we may confidently look for the very best results from the action we have taken.

In behalf of the officers of the Society, thanking all who have labored so faithfully in its interests the past year, and especially those who have made this meeting so successful, this report is respectfully submitted.

CHARLES S. SHELDON, *Secretary.*

DR. W. T. SARLES: I move the adoption of the report of the Secretary, with the understanding that the President and Secretary review that part of the report relative to reorganization and leave out that part pertaining to the matter of the National Charter, as the House of Delegates of the American Medical Association has appointed a committee already to take up that matter, so that this will not have to be considered.

Motion carried.

DR. REDELINGS: I would like at this time to suggest that the prospective program committee receive some instructions from the Society. We lost valuable time and a great deal of it in attempting to determine things not settled by record. Our work has been rushed too much and not sufficient time has been given to discussions. For that reason I would suggest that the Society establish a limitation to the number of papers, and that the Program Committee be governed by that instruction. So far as the method adopted of securing the papers is concerned, I have no choice—I think the present method works very well.

REPORT OF COMMITTEE ON ETHICS.

DR. SARLES: I desire to say, as a member of the Committee for the revision of the code at the New Orleans meeting of the A. M. A., that a code has been adopted by the American Medical Association for the first time in its history, and it is a good code, too.

Under the new constitution we accept that as our code of ethics, and therefore the Committee on Ethics has nothing further to report. The code will be printed in the Journal of the American Medical Association.

Report accepted and unanimously adopted.

DR. SARLES: I hereby offer the following resolution:

Resolved, **That the Provisional Council appointed by the President for the ensuing year, be empowered by the Society to exercise all the powers delegated to the Councilors and House of Delegates of this Society under the Constitution and By-Laws adopted at this session.**

Motion carried.

Dr. T. L. Harrington offered the following resolution:

Whereas, **The Brainard Medical Society at its last quarterly meeting appointed the undersigned committee to present to the Wisconsin State Medical Society the question of the establishment of sanitoria for the treatment of consumption, together with the advisability of inaugurating a campaign for the education of the people to a realization 1st, of the curability of consumption in the early stages; 2d, of the contagiousness of the disease and the manner of its spreading, and 3d, of the advisability of securing state and municipal aid in the establishment of sanitoria for the treatment of the consumptive poor; be it**

Resolved, **That the Wisconsin State Medical Society co-operate with the smaller medical societies throughout the state for the dissemination of such knowledge and the establishment of sanitoria for the treatment of the consumptive poor. Be it further**

Resolved, **That the President appoint a committee of 5 to devise plans for the furtherance of these ends, such committee to report to the next annual meeting of this Society.**

T. L. HARRINGTON.
W. H. NEILSON,
H. PHILLER.

On motion the resolution was unanimously adopted.

The Society then proceeded to the annual election of officers.

DR. LEMON: I nominate Dr. F. E. Walbridge, of Milwaukee, for President of the Society for the coming year.

Nomination seconded by Dr. Hill.

DR. SARLES: I move that we dispense with all formalities of election and declare Dr. Walbridge our unanimous choice.

A motion was made and unanimously carried that the Secretary cast the vote of the Society for Dr. Walbridge for President for the ensuing year, which was done.

DR. WALBRIDGE: No member of this Society appreciates the honor that you have attempted to confer upon me, more than I do. No one feels more deeply than I do the confidence that the members of this Society have shown in asking me to be President of it. But for personal reasons I must decline the honor. I cannot state my reasons to you, gentlemen of the Society, but my friends know what they are, but I want you to understand that I fully appreciate, as much so as

any member of the Society can, your feeling towards me. I have been very active in some directions in matters pertaining to medical legislation in this state, and have tried conscientiously to carry out what was for the highest and best good of the medical profession in this state, and while I have not done as much as a good many others have in this direction, at the same time your action to-day has convinced me that most of the time I have been on the right side, and I cannot express to you in words my feelings toward you for this action, but I must certainly decline to accept the Presidency.

DR. HAY: If the gentleman is satisfied that he has always tried to be on the right side he ought to be consistent and not make a mistake now.

DR. SARLES: The time comes in every man's career when duties arise which he must accept. Now we felt that this Presidency belonged to Milwaukee at this time. It has been out of the city for a number of years, and we feel that the time has come, and the consensus of opinion seems to be that Dr. Walbridge, who has been up before us two or three times and very nearly elected at one time, was the logical candidate, and we feel that it is his duty to accept the position.

(Dr. Walbridge here arose amid great applause.)

DR. WALBRIDGE: Mr. President, I thought I could resist anything. If anybody had told me an hour ago that I would say what I am going to say now, I would not have believed him. Gentlemen, again I thank you, and I will accept the office.

DR. SARLES: I would like to name Dr. James Mills, of Janesville, one of our old members and one of our hard workers in this Society, for the office of First Vice-President of the Society for the ensuing year, and I move that the nominations be closed and the rules be suspended and that the Secretary be instructed to cast the vote of the Society in accordance with the motion.

Motion unanimously carried and the Secretary cast the ballot as directed.

DR. LEMON: I nominate Dr. C. C. Gratiot, of Shullsberg, for Second Vice-President, and move that the rules be suspended and that the Secretary cast the unanimous ballot of the Society electing him.

Motion unanimously carried and the Secretary cast the ballot as directed.

DR. SARLES: I move that the rules be suspended and that the President cast the ballot for Dr. Charles S. Sheldon as Secretary of the Society for the ensuing year.

Motion unanimously carried and the ballot was so cast.

DR. SARLES: I move that the rules be suspended and that Dr. Sidney S. Hall be elected Treasurer of the Association for the ensuing year, and that the Secretary be instructed to cast the ballot of the Society for him.

Motion unanimously carried and the ballot was so cast.

Dr. U. O. B. Wingate, Delegate to the Permanent Committee on Medical Legislation of the American Medical Association, presented the following report:

During the past year on account of the changes incident to the reorganization of the Association the committee of the Association, though in existence, was not authorized to call a meeting of the auxiliary committee, consequently no meeting has been held during the past year.

At the meeting this year in New Orleans the following amendment to the by-laws was presented to the House of Delegates:

"Section 3. Committee on National Legislation: The Committee on National Legislation shall consist of three members appointed by the president, one for a term of one year, one for a term of two years, and one for a term of three years, but whose successors shall each be appointed as vacancies occur, for a term of three years and an auxiliary committee to be composed of one delegate or alternate from each state and territorial society represented in this Association, to be approved annually by the President of the Association on the nomination of such state or territorial society, and one member from the Army, Navy, and Public Health and Marine Hospital Service, to be nominated by the chief officer of these respective departments, and approved by the President of this Association.

It shall be the duty of the committee to represent before Congress and elsewhere, the wishes of this Association regarding any proposed legislation, that in any respects bears on the promotion and preservation of the public health, or on the material or moral welfare of the medical profession.

This committee shall invite to a conference at Washington, D. C., once in each year, or oftener if need be, the auxiliary committee herein created, at which shall be considered questions of National and State legislation, with a view of uniting all of the influences of the entire profession throughout the country in support of all proper legislation, and of securing uniformity in the same, so far as may be possible and expedient. The committee on National Legislation shall have power to act *ad interim* and its necessary expense shall be paid by the Association."

According to the rules and regulations this proposed amendment must lie over for one year before being acted upon, but there may be a meeting called during the coming year. Your delegate would, therefore, most respectfully recommend that your committee be continued as heretofore, in compliance with the provisions of Section 5 of Article 5 of the by-laws adopted in 1900.

Respectfully submitted,

U. O. B. WINGATE, *Delegate.*

June, 1903.

On motion the report was adopted, and the committee continued.

DR. WINGATE: It may be interesting to the members of the Association to know that the Committee on the Rush Monument Fund at last has succeeded in securing funds sufficient for the construction of a monument. The foundation has already been laid in Washington, the monument will cost $15,000 and will be completed about next October.

DR. SARLES: I would like to have a correction made to the minutes in reference to the election of Dr. Reineking, who was elected for two years, but the minutes show that it was for one year. The first meeting elected two members, one for one year, and one for two years, and afterwards one for every two years, and I move that the Secretary be authorized to correct the minutes so as to show that Dr. Herman Reineking is elected as delegate for the American Medical Association for two years instead of one.

Motion carried.

DR. REINEKING: I nominate as delegate to the American Medical Association to succeed Dr. Sarles, Dr. Edward Evans, of La Crosse.

Motion carried.

DR. SARLES: The members of the Provisional Council will please meet at the President's desk immediately after adjournment to see about meeting this afternoon.

The Secretary read the following communication:

Milwaukee, June 4, 1903.

To the State Medical Society of Wisconsin, in convention.

GENTLEMEN: The Citizens' Business League takes pleasure in renewing former invitations to you to hold your annual convention in Milwaukee, and sincerely trusts that the vote of your House of Delegates will be to meet here again next year. We are always glad to see you with us and we are confident that the accomodations Milwaukee offers, its easy access from all parts of the state, and the hospitality of our people is sufficient guarantee to ensure for your meetings a large and enthusiastic attendance.

Wishing you continued prosperity, we are,

Yours truly,

CITIZENS' BUSINESS LEAGUE,

By R. R. WATROUS, *Secretary*.

DR. SEARS: I move that Milwaukee be named as the next place of meeting.

Motion carried.

Dr. Sarles and Dr. Hill were appointed as a committee to escort Dr. Walbridge to the rostrum.

DR. LYMAN: I take great pleasure in introducing as President of our Society, Dr. F. E. Walbridge.

Dr. Walbridge took the chair.

DR. WALBRIDGE: Gentlemen, I have just made the longest speech to you that I ever made in my life, and I therefore simply thank you.

DR. SARLES: I move that a sincere vote of thanks be extended to the Program Committee, to the Entertainment Committee, and to the management of the hotel and the citizens generally who have been interested in caring for us here in Milwaukee, for their hospitality, excellent entertainment and work.

DR. HILL: I wish to move that the Society tender its thanks to our retiring President for his untiring zeal in bringing about the reorganization of our State Society, and the harmony that is existing throughout the state in the medical profession to-day.

Motion unanimously carried.

There being no further business the Society adjourned at 2 o'clock p. m.

CHARLES S. SHELDON, SECRETARY.

THE ANNIVERSARY BANQUET.

The banquet was held in the dining room of the Plankinton House at 8 o'clock on Thursday evening. The attendance was much the largest in the history of the Society, some 250 being present, this in spite of the price per plate being $1.50 and paid by the individual members. Many ladies were present, and the occasion as a whole was most enjoyable and inspiring. The "Saw-Bones Choir" would have acquitted themselves with more credit if the chorister and the orchestra had not insisted upon each having a time of his own in singing the songs. Dr. Wingate acted as toastmaster and presided with his usual grand dignity over the following banquet program:

Invocation.

Reading of the Roll of Honor.

The State Medical Society—Its Past and Future....Dr. L. H. Pelton, Waupaca

With pride we recall the past;
Without fear we welcome the future.

The Clerical and Medical Professions—Their Joint Efforts for the Betterment of Mankind.....Rev. James C. Hodgins, Milwaukee

Each must, in virtue, strive for to excel;
The man lives twice who lives the first life well.
—*Herrick.*

The Legal and the Medical Professions.....Mr. Edward P. Vilas, Milwaukee

Use law and physic only for necessity * * *
They are good remedies, bad business, and
worse recreations. —*Quarles.*

The Country Doctor—His Place in the Profession...Dr. J. R. Barnett, Neenah

Soft be thy pillow, servant of mankind,
Lulled by an opiate Art could never find;
Sweet be thy slumber—thou hast earned it well—
Pleasant thy dreams! Clang goes the midnight bell!
—*Holmes.*

Modern Irregularities in Medical Practice—Their Scope and End.....
.....Dr. Richard Dewey, Wauwatosa

Towns from a nostrum-vender get their name,
Fences and walls the cure-all drug proclaim;
Plasters and pads the willing world beguile,
Fair Lydia greets us with astringent smile.
—*Holmes.*

NEW MEMBERS ADMITTED DURING THE SESSION OF 1903.

F. W. Arnold, Milwaukee Medical College, 1902.
I. G. Babcock, Bellevue Hospital Medical College, N. Y., 1888.
George Rowe Baker, Milwaukee Medical College, 1900.
H. C. Barckmann, Kiel Medical College, Germany, 1888.
George Peter Barth, Med. Dept. Univ. of Pennsylvania. 1898.
S. D. Beebe, Rush Medical College, 1896.
Frederick D. Bentley, Rush Medical College, 1886.
Adelheim Bernhard, Strassburg University, Germany, 1886.
James E. Boden, Milwaukee Medical College. 1901.
Eugene Leigh Boothby, Dartmouth Medical College, 1874.
Guy Clayton Bowe, Med. Dept. Northwestern Univ., 1895.
Floyd D. Brooks, Pulte Med. College, Cincinnati, 1878.
Chas. David Collins, Wis. Coll. Physicians and Surgeons, 1902.
John Mockler Conroy, N. Y. Univ. and Bellevue Hosp. Med. College, 1899.
T. Francis Conroy, Rush Medical College, 1896.
Hoyt E. Dearholt, Rush Medical College, 1900.
Clark Ogden Decker, Milwaukee Medical College, 1901.
Frank P. Dohearty, Med. Dept. Northwestern Univ., 1897.
Frank I. Drake, Rush Medical College, 1894.
Royal L. Eddington, Barnes Med. College, St. Louis, 1900.
Sherman Edwards, Rush Medical College, 1893.
Robert C. Faulds, Wis. College Physicians and Surgeons, 1898.
Otto A. Fiedler, Wis. College Physicians and Surgeons, 1902.
Otto H. Foerster, Med. Dept. Univ. of Pennsylvania, 1898.
John Hugh Frances, Milwaukee Medical College, 1900.
Hiram Fulton, Milwaukee Medical College, 1901.

Clarke Gapen, Chicago Medical College, 1875.
William Wesley Gill, Rush Medical College, 1883.
George M. Goodrick, Eclectic Medical Institute, Cincinnati, 1883.
Charles Gorst, College Physicians and Surgeons, Keokuk, 1879.
Clarence F. Hardy, Johns Hopkins Univ. Medical College, 1902.
George M. Henbest, College Physicians and Surgeons, Chicago, 1901.
Maurice LeRoy Henderson, College Phy. and Surgeons, Chicago, 1902.
Allen L. Herron, Howard Univ. Med. College, Washington, 1892.
Gustav O. Hipke, College Physicians and Surgeons, Chicago, 1890.
Wesley Irvine, Univ. Maryland School of Medicine, 1901.
Albert George Jenner, Med. Dept. Univ. of Pennsylvania, 1897.
Edward H. Jones, Rush Medical College, 1883.
Martin A. Kleinhaus, Milwaukee Medical College, 1902.
William A. Lester, Rush Medical College, 1881.
Harry S. Lester, Iowa State Univ. Medical College, 1898.
James D. Madison, Johns Hopkins Univ. Medical College, 1898.
W. H. Macdonald, Chicago Homeopathic College, 1888.
J. S. MacBride, Detroit Medical College, 1897.
Victor F. Marshall, Rush Medical College, 1898.
John G.Meachem, Rush Medical College, 1897.
John R. Moore, Chicago Medical College, 1873.
Armin Mueller, Wisconsin College Physicians and Surgeons, 1902.
Herman L. Nahin, College Physicians and Surgeons, Chicago, 1895.
W. J. Pearce, Rush Medical College, 1881.
George E. Peterson, Milwaukee Medical College, 1901.
Thomas C. Phillips, Med. Dept. Univ. of Michigan, 1887.
Frank J. Pope, Rush Medical College, 1875.
Flora A. Read, Woman's Medical Coll. of Chicago, 1895.
Charles E. Remaly, Med. Dept. Univ. of Pennsylvania, 1897.
Edward Dwight Rigby, Milwaukee Medical College, 1902.
Philip F. Rogers, Med. Dept. Northwestern Univ., 1897.
Abraham B. Rosenberry, Rush Medical College, 1883.
Stephen S. Salinko, Maryland Medical College, 1901.
Manly J. Sanborn, Med. Dept. Northwestern Univ., 1896.
Adelbert Schneider, Strassburg Univ., Germany, 1886.
Bruno L. Schuster, Jefferson Medical College, 1898.
Sidney M. Smith, Queen's Medical College, Canada, 1900.
Milton M. Spitz, Wisconsin College Physicians and Surgeons, 1901.
Hubert S. Steenberg, Milwaukee Medical College, 1902.
J. I. Suby, Central Coll. Physicians and Surgeons, Indianapolis, 1900.
William J. Thompson, Med. Dept. Northwestern Univ., 1899.
Lewis C. Tisdale, Wis. College Physicians and Surgeons, 1901.
Samuel Gordon Todd, Queen's Univ. Medical College, Canada, 1890.
Charles R. Treat, Chicago Homeopathic Medical College, 1888.
Fred V. Watson, Marion Simms College of Medicine, 1899.
Fred R. Weber, Univ. Munich, Germany, 1890.
Alexander J. Williams, Rush Medical College, 1900.
H. H. Williams, Rush Medical College, 1896.
George Guido Zoehrlaut, College Physicians and Surgeons, Chicago, 1902.

BARRON-GATES-POLK COUNTIES MEDICAL SOCIETY.

At a meeting of the Barron County Medical Society at Barron, August 13th, the organization was disbanded and an inter-county society formed embracing the counties of Barron, Gates and Polk, with the following officers: President, Dr. Olaf M. Sattre, Rice Lake; vice-presidents, Drs. Clark C. Post, Barron; W. F. O'Connor, Tony, and Herbert B. Commett, Amery; state delegate, Dr. Gentz Perry, Amery; censors, Drs. Axel Hedback, Barron; Charles R. Hudgel, Ladysmith, and Abraham L. Wells, Clear Lake. The new society will be auxiliary to the state and national societies.

COLUMBIA COUNTY MEDICAL SOCIETY.

At a meeting held at Portage on September 9th, the Columbia County Medical Society was organized. The ballot for officers resulted in the election of Dr. J. J. Howard, Columbus, president; Dr. J. Binnie, Poynette, vice-president; Dr. F. D. Bentley, Portage, secretary and treasurer.

LA CROSSE COUNTY MEDICAL SOCIETY.

At the regular monthly meeting of the La Crosse County Medical Society, held on September 3d, the Constitution and By-Laws formulated by the American Medical Association were formally adopted. As this occupied the entire evening no cases or papers were presented.

CHAS. H. MARQUARDT, M. D., Secretary.

WASHBURN-SAWYER-BURNETT COUNTIES MEDICAL SOCIETY.

At a largely attended meeting held at Spooner on September 9th, the Washburn-Sawyer-Burnett Counties Medical Society was organized. Dr. J. B. Trowbridge, of Hayward, was elected president; Dr. J. P. Cox, of Spooner, vice-president, and Dr. Hering, of Shell Lake, secretary and treasurer. A banquet followed the convention.

WASHINGTON COUNTY MEDICAL SOCIETY.

The second meeting of the Washington County Medical Society was held at Braun's hotel, Jackson, July 29, 1903, at 2 p. m. The meeting was called to order by the president, the following physicians being present: E. M. Rogers, D. W. Lynch, J. E. Reichert, Henry Blank, W. J. Wehle, E. H. Ehlert, B. A. Hoermann, N. E. Hausmann, C. Bossard and G. A. Heidner.

The by-laws for county societies, as suggested by the American Medical Association, were adopted with what modifications seemed required by local conditions.

Dr. W. J. Wehle presented a case for diagnosis and treatment.

The Board of Censors recommended the admission to membership of the following candidates: E. M. Rogers, D. W. Lynch, E. H. Ehlert, J. E. Reichert, G. A. Heidner, B. A. Hoermann, Henry Blank and Clemens Bossard. The recommendation of the censors was adopted.

A very able paper on *Pott's disease* was read by Dr. Blank, in which he advocated rest in the horizontal position, mechanical supports by various appliances and casts, and advised tonics, etc. He discouraged the various operative procedures and particularly forcible correction in chronic cases. Dr. Bossard followed with a brief but practical paper on *Lumbago,* in which he recommended the use of massage, bryonia and the salicylates. He thought bryonia particularly indicated in the very acute cases where the patient was disinclined to move. Dr. Hoermann read an exhaustive paper on the *management of summer diarrhea of children* in which he laid much stress on the importance of clearing the stomach and bowels of fermenting germ-laden substances either by lavage or other means. He cautioned against the use of opiates before the alimentary tract has been cleared. The use of bismuth and change of diet to improve the digestion was advocated. Dr. Wehle recommended the use of albumin water when the stools are curdy, but not fetid, and the use of arrow root when they are very fetid and green when passed.

It was decided to hold the next meeting at Schlesingerville. According to the by-laws the meetings will be held quarterly on the last Wednesdays of March, June, September and December of each year. The annual meeting is to be held in December, and is to be a business meeting only. The program committee will arrange a suitable program for the next meeting.

G. A. HEIDNER, Secretary.

CENTRAL WISCONSIN MEDICAL SOCIETY.

Meeting of July 28, 1903.

The president, Dr. L. F. Bennett, in the chair.

Dr. E. C. Helm, of Beloit, read a paper on "The Physician—What shall be his Attitude on the Labor Question?" Drs. Evans, Haines, Blakely, Thienhaus, Strong, Bennett and Nuzum joined in the discussion.

Dr. Edward Evans, of La Crosse, read a paper on "The Diagnostic Importance of some mild cases of Appendicitis," which was discussed by Drs. J. A. Jackson, Thienhaus, R. H. Jackson, Helm, Moyer, Nuzum, Boyce and C. S. Sheldon.

Dr. R. H. Jackson, of Madison, read a paper on "Vesical Calculi, with presentation of specimens," in the discussion of which Drs. Evans, Nuzum, J. A. Jackson and Boyer participated.

Dr. W. H. Payne, of Beloit, read a paper on "Acute Yellow Atrophy of the Liver, with report of a case," the subject was discussed by Drs. Helm, Moyer, J. A. Jackson and C. S. Sheldon.

Dr. Homer Sylvester, of Milwaukee, read a paper on "Gonorrheal Arthritis," which was discussed by Drs. McCabe, Blakely, Boyce, Evans, Nuzum, Helm, Thienhaus and J. A. Jackson.

The annual banquet was held at noon at the Park Hotel, and was attended by over thirty members; toasts were responded to by Drs. J. A. Jackson, L. F. Bennett and C. S. Sheldon.

At the afternoon session Drs. H. E. Purcell and G. M. Henbest, both of Madison, were elected to membership. Then followed the address of the retiring president, Dr. L. F. Bennett, of Beloit.

Dr. P. R. Fox, of Madison, read a paper on "Emergency Prostatectomy," in the discussion of which Drs. Gill, Lewis and Blakely spoke.

Dr. W. F. McCabe, of Beloit, read a paper on "Lavage of the Stomach," Drs. Boyce, P. R. Fox, Blakely, C. S. Sheldon, Bennett, Thienhaus and Pickering participated in the discussion.

Dr. C. R. Pickering of Muscoda, read a paper on "The Country Doctor and the Microscope," which was discussed by Drs. Cutler, W. H. Sheldon and Boyce.

The annual election of officers resulted as follows: President, Dr. Edward Evans, La Crosse; first vice-president, Dr. T. W. Nuzum, Brodhead; second vice-president, Dr. W. H. Palmer, Janesville; third vice-president, Dr. L. V. Lewis, Sun Prairie; fourth vice-president, Dr. C. R. Pickering, Muscoda; secretary and treasurer, Dr. C. S. Sheldon, Madison. Censors: Drs. W. F. McCabe, Beloit; T. W. Evans, Madison; J. C. Cutler, Verona; W. E. L. Froggatt, Cross Plains.

The next meeting will be held at Janesville on the last Tuesday in October.

C. S. SHELDON, M. D., Secretary.

FOX RIVER VALLEY MEDICAL SOCIETY.

The meeting of the Fox River Valley Medical Society was called to order by the president, Dr. J. P. Noer, at the Stephenson hotel, in Menominee, Mich., on July 21, 1903. The following program was presented:

Cholera Infantum, by Dr. Walter Hicks of Menominee. Discussion by Drs. M. D. Bird of Marinette, A. W. Slaughter of Green Bay, and R. E. Minahan of Green Bay.

Gastric Ulcer, Dr. A. T. Nadeau of Marinette. Discussion by Drs. W. G. Nicholson of Green Bay, W. E. Fairfield of Green Bay, J. R. Minahan of Green Bay and O. Thienhaus of Milwaukee.

"A Contribution to the Diagnosis and Treatment of Unruptured and Ruptured Extra-uterine Pregnancy, without and with Hematocele; with Demonstration of Specimen," by Dr. O. Thienhaus of Milwaukee. Discussion by Drs. J. R. Minahan of Green Bay, J. Eugene Grignon of Menominee, W. E. Fairfield of Green Bay and D. T. Phillips of Menominee.

A case of Basedow's disease was presented by Dr. N. I. Tibbits of Peshtigo. The condition was discussed by Drs. R. E. Minahan of Green Bay, J. R. Minahan of Green Bay, and C. H. Charles of Menominee.

In the evening the members of the Fox River Valley Medical Society were banqueted by the Menominee County and the Marinette County Medical Societies at the Stephenson hotel. At this sumptuous repast the well established reputation of the Menominee River physicians for entertainment and good fellowship was abundantly sustained.

INTER-COUNTY MEDICAL SOCIETY.

The midsummer meeting of the Inter-County Medical Society was held at New Richmond on July 21, and the following programme was presented: "A Plea for Child-bearing Women," Dr. W. E. Ground, West Superior; "Goitre," Dr. J. T. Rogers, St. Paul; "Labor and the Puerperal State," Dr. F. W. Epley, New Richmond; "Organization of County Medical Societies under the new constitution of the State Medical Association," Dr. E. L. Boothby, Hammond.

It is expected that at the annual meeting at Eau Claire in November the organization will be formally disbanded to clear the way for the organization of county societies in the territory which it has hitherto covered.

CAROLINE HEDGER, M. D., Secretary.

CURRENT LITERATURE.

GYNECOLOGY AND OBSTETRICS.

A. W. Gray, M.D., E. W. Kellogg, M.D.

A Plea for the Better Care of Women after Labor.— WM. M. SPRIGGS (*Am. Journal of Obstetrics*, July, 1903) complains of the small amount of care given to repairing lacerations after labor. Perineal and vaginal lacerations "if extensive" are looked after, but cervical and smaller vaginal tears are left to nature for restoration. Large lacerations, and any lacerations in which blood vessels are torn, should be repaired at once. Submucous and cervical tears cannot be well detected and satisfactorily repaired immediately after delivery, but should be in 48 hours. He quotes Hirst in advising that every woman should be subjected to three examinations after labor, viz.:

The first within 48 hours to detect injuries of child-birth. The second before she leaves her bed to determine position of uterus. The third at the end of the puerperium—six weeks after labor. (A. W. G.)

Influence of Diet During Pregnancy upon Offspring.—D. NOEL PATON (*London Lancet*, July 4, 1903) stimulated by Prochownick's observation that reduction of diet of the mother resulted in restricting the size of the child, the object being to facilitate labor in cases of narrow pelves, experimented upon guinea-pigs with the following conclusions: That the size of the offspring depends very directly upon diet and nutrition of the mother during pregnancy; that nourishment of maternal tissues seems to take precedence over nutrition of the foetus, showing limitation in the extent to which tissues of the mother can be utilized for construction of the embryo; that these facts help to explain the comparatively easy labors among the healthy, but underfed, lower classes, and probably also help to explain the very high infant mortality among the poor. (A. W. G.)

The Effect of the Toxemia of Pregnancy upon the Cardio-Vascular System.—RICHARD C. NORRIS (*Am. Journal of Obstetrics*, July, 1903) points out that the most important clinical and constitutional sign of a beginning toxemia is to be found in a careful study of the pulse, which early shows increased tension; that this is explained by the physiological fact that, while for a time continued stimulation (irritation of toxins) is felt equally by the vagus (inhibitory) and accelerator (motor) nerves and by the vaso-dilators and constrictors, there finally results a prepondering influence upon the accelerator and vaso-constrictors, accounting for rapid heart action and high arterial tension. Cardio-vascular changes as above usually induce disorders of the central nervous system, manifested by convulsions, but in rare cases some other organ, for example the heart, bears the brunt, the patient dying without convulsions. He reports two cases with autopsies, in which exceedingly rapid heart action was the principle symptom, no heart lesion being discoverable before or after death. He believes that the toxemia present had destroyed the equilibrium normally existing between the vagus and accelerator nerves, and that if a drug existed which could act directly and only upon the vagus, thus inhibiting the heart's action, results could be accomplished in these cases. (A. W. G.)

THE WISCONSIN
MEDICAL JOURNAL

OCTOBER, 1903

THE DIAGNOSIS OF HYSTERIA.

BY HUGH T. PATRICK, M. D.,

Professor of Clinical Neurology, Northwestern University Medical School,

CHICAGO.

In fifteen or twenty minutes one cannot go very far into the subject of the Diagnosis of Hysteria, and I shall not only be very brief but shall also confine my remarks to such well known symptoms as are easily remembered, very easily elicited, easily demonstrable to others, and particularly such symptoms as apply to traumatic hysteria or the hysterical sequelæ of traumatism.

Traumatic hysteria has, I believe, become very much more frequent in late years than formerly, due to the enormous development of rapid transportation, the enormous development of machinery, and the general use of electric currents in commercial and other ways, and also due to the great prevalence of the notorious damage suit, which undoubtedly has a very potent action in the development of hysterical symptoms.

First, I wish to speak of hysterical anesthesia. Hysterical anesthesia must be looked for, because very frequently, although it is well-developed and easily demonstrable on examination, the patient is entirely ignorant of it, and unless an examination is made to see whether there may be an anesthesia, the physician has no means of suspecting that it may be present, except from his knowledge of the disease in general.

Three striking characteristics of hysterical anesthesia may be mentioned; first, as regards its distribution, second, as regards its

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 4, 1903.

limitation or border, and third, as regards the rapid shifting of this border. Anesthesia of hysterical origin very rarely, if ever, corresponds to any anatomical part of the nervous system; that is, it does not correspond accurately to the distribution of any peripheral nerve or part of a nerve. It does not correspond to any of the spinal segments or levels of the spinal cord, with the exception only of a paraplegic anesthesia, and the difficulty in this case is easily overcome by other criteria presently to be mentioned.

The so-called glove or sleeve or stocking anesthesia, the anesthesia that extends up an extremity to a certain level and there stops, corresponds to no possible anatomical condition, and is always typical of hysterical anesthesia. (See Figures 1, 2, 3 and 6.)

Anesthesia of organic origin, whether the organic disease be one of the brain, of the spinal cord or of the peripheral nerves, always has a graduated or gradually diminishing border. Of course there is a reason for this, and that is that no sensory nerve is distributed right up to a line and stops there. The various sensory nerves, or two distinct branches of the same sensory nerve, always overlap. This applies equally to the median line of the body. That is, the sensory nerves of the right half of the body do not supply sensation exactly to the median line and stop there, but extend across the middle line a little bit, interlacing, as it were, with those of the opposite side. Supposing, then, the sensory nerves on one side of the body to be paralyzed, or their conduction impaired, the result would naturally be that as one approached the middle line there would begin to be a little interference with sensation before the middle line was reached; that anesthesia would cross over to the sound side; there would be a little anesthesia for a short distance beyond the median line on the sound half of the body. To illustrate this in another way: if the sensory root of one of the spinal nerves in the thoracic region be cut, there is *no* area of total anesthesia. The area supplied by that nerve is supplied also to a less extent by the nerve above and the nerve below. This overlapping easily explains why in any case of anesthesia of organic origin the anesthesia begins gradually, if you like; at a certain place it begins to be noticeable, and then as one progresses toward or into the anesthetic area, it becomes much more pronounced. This does not apply to the anesthesia of hysterical origin, but to demonstrate that the anesthesia of hysterical origin has a sharp and cleanly cut and well pronounced border, it must be examined for. The patient does not know it, and the doctor will not know it, unless he looks to see that it is so; and that requires a little care in the examination. Now, supposing the patient to be anesthetic up the

arm for a certain distance, and that there is no anesthesia apparent above. The patient is to be blindfolded, of course. He is then pricked with a pin or touched lightly with a bit of cotton, well within the normal surface and is asked, "Do you feel that?" "Yes, I feel it there." Then pricking well into the anesthetic area, "Do you feel that?" "No." Again pricking in the normal area but nearer to the anesthesia, "Do you feel that?" "Yes." And the physician gradually approaches the two alternate points of contact until he gets them very close. I have never known this method to fail. With a little care it can easily be demonstrated that perhaps ⅛ of an inch, 1-16 or 1-32 part of an inch or less separates an area where a pin point is not felt at all, from an area where it is felt perfectly. Now that is an absolute demonstration that this anesthesia is of hysterical origin, and I have never known the sign to fail if it is carefully examined for. (See Figures 1, 2, 3, and 6.) I suppose that one reason that it can be demonstrated is that the element of suggestion enters so enormously in the symptomatology of hysteria.

The same principle applies to the tactile as to the pain sense, and it only requires a little care to make the correct diagnosis. Knowing the anatomical fact mentioned, we know that such anesthesia must be functional and not organic, but let me put in parenthesis right here, that one must not always conclude because there is an hysterical anesthesia that therefore the whole condition is hysterical. The combination of organic and functional disease is not at all rare, and one is no more justified in saying that all the symptoms of a certain case must be due to hysteria, simply having demonstrated the presence of hysteria, than one is justified in saying that because there is some organic disease present, therefore everything that is present in that case is due to that particular organic disease.

The next point and one which is a very useful one, is the rapid shifting of this sharp border of anesthesia. This is very useful, of course, for diagnosis, and it is of great practical use in the medico-legal cases, because even the average juryman can understand that if at a given examination the anesthesia extends to a certain point, and five minutes afterwards it extends two inches further, and perhaps ten minutes later it extends to still another point, the trouble cannot be due to any disease or nerves or nerve tissue; and it is very useful also, because one may demonstrate a common case like that to friends of the family when it is necessary to insist on a certain line of treatment, or to an attorney in a medico-legal case.

Examination for this shifting of the border of anesthesia must be done carefully. It would not do, if we have demonstrated that the

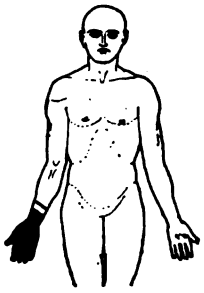


Figure 1. Glove anesthesia in a case of hysterical paralysis of the hand following a slight injury. The border of the anesthesia is sharply defined and the line indicates extent to which this border shifted during the examination.

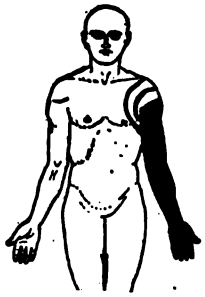


Figure 2. Sleeve anesthesia in a case of hysterical paralysis of the arm induced by sleeping on the arm. After the pressure paralysis had disappeared, the hysterical paralysis and anesthesia persisted. Lines indicate extent of rapid shifting of anesthesia.

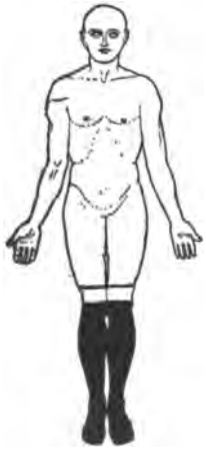


Figure 3. Bilateral stocking anesthesia in a case of hysterical paraplegia. Borders are clean-cut but shifted as indicated by line.

Figure 4. Hyperesthesia in a case of hysterical knee. The border was found to be sharply defined, but within a few minutes shifted to the extent shown by the lines.

Figure 5. Exquisite hyperesthesia in a case of hysterical hemiplegia induced by articular rheumatism. Although the tenderness was exceedingly acute and its limits so sharply defined, the limits shifted as shown by the heavy lines.

Figure 6. Anesthesia in a case of hysterical paraplegia from injury in a railway collision. Anesthesia and analgesia complete, border sharp, shifting distinct.

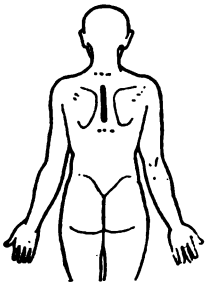


Figure 7. Case of tender back following an accident. Heavy line indicates location of tenderness as first found; dotted lines indicate its limits a few minutes later.

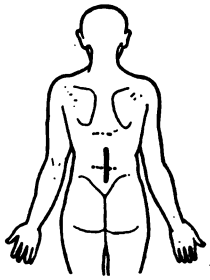


Figure 8. Case of tender back induced by a previous lumbago. Heavy line indicates location of tenderness; dotted lines show extent to which it shifted.

anesthesia extends to a certain point, say in the arm, and has a sharp border, to come back and simply say to the patient, "Now let us see, you feel it right up to there; that you don't feel and this you do feel." That would be a plain suggestion, or rather simply a statement to the patient of the state of affairs. Having demonstrated where the limit of the anesthesia is, if one will mark the point on the skin with a pencil, and then leave it for five or ten minutes while one examines the haret, reflexes, or sensation somewhere else, or gets a little bit of the history that one has forgotten to obtain, and then comes back, without allowing the patient to see just where that mark is, and then make the examination all over again, not beginning at the line of anesthesia at all, but very far away from it, the result is never in doubt. We say anew to the patient, "Just say 'Yes' every time I touch you," and gradually approach the anesthesia, touch by touch, or prick by prick, and not too fast, we find that the patient feels down to a certain line—but not the same line; our border has shifted up or down. In cases of paraplegia with anesthesia from the waist downward, and uselessness of the extremities, these symptoms are valuable indeed in making a diagnosis between organic and functional disease. (See Figures 1, 2, 3 and 6.)

Now, of course, there is a reason for this. If one takes a normal individual and blindfolds him, or carries out this little maneuver on the back where the individual cannot see it, the result is identical. Just touch the patient on the back and say, "I will touch you right there, now remember where that is;" then after ten minutes ask him to tell you where the point is, and he cannot do it, unless it is accidental, because the memory of *location* of sensory impressions is not sufficiently accurate. Of course it is easy to tell that one has been touched on the back, and one could easily tell if it had been on the neck or buttocks, but as between an inch or an inch and a half, or two inches, the distinction cannot be made. I have known it to vary as much as four inches on the back in a perfectly healthy man. The anesthesia of the hysterical patient, being a functional trouble, being indeed a psychic difficulty, the patient is utterly unable to remember exactly the location of the sensory impression made in the examination.

Of equal value, sometimes of very much more value, is the fact that this shifting of the border as well as the sharpness of definition, applies to hysterical hyperesthesia, or hysterical tenderness, just as well as to hysterical anesthesia. I have found this exceedingly useful in the examination of tender joints, for instance. Having defined a tenderness of the joint, if, in the first place, that tenderness can be

demonstrated to have an exceedingly sharp border, and then, even supposing that an organic tenderness of a joint could have such a sharply defined border, if one finds afterward quite a space not tender at all first, which a few minutes later has become tender, and the first place so sensitive ten minutes ago, suddenly is no longer sensitive, it is an absolute demonstration that the trouble is functional and not organic. (See Figures 4 and 5.)

Just one more illustration of these little points in the examination of hysterical cases and I shall have finished. I want to make this illustration, because I think of all the results of general traumatisms, certainly by far the most frequent symptom that I have learned of in these cases of general shaking up with trouble developing into damage suits, is pain and tenderness of the back. This shifting of the definite location is exceedingly valuable in such cases. I have used this simple means of diagnosis in many scores of cases and have found it exceedingly useful. Suppose we have one of these cases, whether of traumatic origin or not, in which there is much pain and tenderness in the back, in which the woman cannot wear corsets or the man cannot wear suspenders, or cannot lie on his back at night; in which he carefully gets his night shirt away from his spine before attempting to sleep, etc. The method of diagnosis is the same as in anesthesia or hyperesthesia of a joint or extremity. The patient says it is very tender at a certain point. Now, in coming to any conclusion on that point, it is neither scientific nor safe to take the patient's statement. The patient says, "Right along there, that is the place." If we press at that place and ask, "Does that hurt?" "Of course it hurts." If the disease is organic in origin it naturally hurts, and if it is functional of course it hurts too. But do not let the patient make the examination for you. You manage your own business, and the way you manage it is to say, "Never mind, I will find that place," and then start a long way from it, even on top of the head, if you will. The eraser on the end of a lead pencil is an excellent thing for the purpose. Come down slowly and deliberately, pressing at intervals of half an inch, and soon you touch the place, the place where your patient winces. Now ask him to tell you when it does not hurt. You may find that he locates the spot as covering one, or two, or three, or more vertebræ. If the trouble is of functional origin there is not a patient born who can locate those identical spines fifteen minutes later—or at least a second or third time. A little repetition of the examination will show that it will not be these particular spines at all, but may be a different number, or, if the number remain the same, the location will have shifted. That is, if the derangement is func-

tional, at any rate there will be a distinct change in the location of a definitely determined tender place. That is not a question of opinion, or disposition, or interpretation; it is a demonstration, and you can go on the stand with a clear conscience and swear that that tenderness is not due to myelitis, spinal meningitis, or any lesion of the vertebræ or their ligaments, or of the membranes of the spinal cord, or to any other organic disease of the back whatsoever, but to functional and psychic disturbance. (See Figures 7 and 8.)

Discussion.

DR. W. F. BECKER, Milwaukee—I have little to say in comment on Dr. Patrick's paper on this *terra incognita* of medicine—*terror* incognita we may say, when it comes to a diagnosis. Yet, general hysteria is sometimes as wonderfully easy to diagnose, as it is wonderfully difficult. I think we are very apt to make the mistake of assuming hysteria because the patient is of the hysterical temperament, and, on the other hand, of not favoring the hysterical temperament. I have had experience in plenty of this kind. I recall the hysterical temperament,—the lack of balance and emotional overflow and all the mental symptoms which we commonly group under the name, hysterical temperament. I have had experience in plenty of this kind. I recall a case where a woman, splendidly balanced—of a sort of masterful mind, was refused the diagnosis of hysteria for years and sent to Dr. Weir Mitchell, who diagnosed and cured her of the disease. Another case I have in mind, was a patient with astasia-abasia, who could not stand or walk, and because she did not have the hysterical temperament the doctor who called me into the case was not willing to accept my diagnosis.

Of course the most characteristic sign of hysteria, is the *seizure*. If we can get these, diagnosis is not very difficult, and I sometimes am willing to make a diagnosis in advance in cases of that kind which are reported to me as having fits of the kind where the patient had to be *held down*. Where you hear of four or six people holding the patient down, I think you can often safely make a diagnosis in advance.

Anesthesias are next in importance, perhaps, because of their peculiar characteristics, which Dr. Patrick has just pointed out, *viz.*, the shifting of the border. Mobility and transfer I have found very common. This behavior of the hysterical anesthesia is so important that we should never neglect to make very thorough examination for it. The patient is often ignorant of its existence and we discover it to him. The importance of such examination came home to me again only a few days ago in a case in which there were convulsions, which I was not able to see and in which there was a reliable history of a dilation of the pupil suggesting an epileptoid or epileptic nature of the case. I had made repeated examinations of the body, and the other day, not long after a convulsion, happened to find an area of anesthesia, just covering the surface of the nose and very limited, also a little hyperesthesia over the arm, and tenderness over the ovaries; and with this anesthesia I think I was justified in standing for my diagnosis in a case which was doubtful before.

The motor symptoms are not so characteristic. I think we are more puzzled where there is an absence of anesthesia which can guide us as mentioned, especially in paraplegic cases. Those cases are simpler where there is a

paralysis of function, rather than of particular muscular groups, as, for instance, those cases in which patients cannot walk or stand, or cannot read or perform a certain function, and yet are able to move the parts in other ways.

The paralysis is frequently that of the higher voluntary movements, the reflex and in a measure automatic movements being retained. The patient therefore moves the affected part when unobserved or when unaware. This fact creates a vast amount of mistake in diagnosis, the patient being accused of shamming because he moves when it is supposed he is off his guard. I presented a case of this kind before the Milwaukee Medical Society recently. Because the patient made many smaller reflex and automatic movements of his arm, it was supposed that he was shamming when unable to make voluntary movements of the same. The presence of characteristic anesthesia here saved my scalp. Speaking of movement I may say that more than twelve years ago I discovered a *slowing* of movement on the anesthetic side in hysterical cases without paralysis. I was able to measure this by the stop-watch. There was diminution of reaction time on the effected side. That the slowing lay in the efferent impulse is probable, as the tests were applied through the several sensory channels. Later I found this phenomenon described, and with others of a similar character it is now studied more completely under Lasegue's syndrome.

The time is too limited to discuss in any degree scarcely the diagnosis of hysteria. Much confusion still prevails between hysteria and neurasthenia, hypochondria, and traumatic neuroses, and particularly organic disease with which—as my teacher, Dr. Seguin, first, I believe, pointed out—hysteria is very commonly associated. We see this association probably more commonly with tumor cerebri than anything else.

In the mental domain of hysteria the French phrase "contraction of the field of consciousness" is the key-note to explanation of hysteria and its diagnosis.

THE ETIOLOGY OF SOME PENSIONED DISABILITIES MEASURED BY MODERN PATHOLOGY.*

BY W. T. SARLES, M. D.,

SPARTA, WIS.

The object of this paper is to take a cursory survey of some pensioned disabilities measured by modern pathology, and to see wherein, after a quarter of a century of unexampled scientific advancement in medicine and surgery, we have been enlightened or not, as to the etiology and symptomatology of these diseases, and their resulting disabilities.

*Read before the National Association U. S. Pension Examining Surgeons, Washington, D. C., May 13, 14, 1903.

Previous to 1881, the bacteriological origin of diseases was unknown. In that year Ogston announced his important discovery, followed closely by that of Rosenbach, which revolutionized the study of acute suppuration. This was followed in 1882 by Koch's announcement of the true cause of tuberculosis, and later followed Lister's great discovery of asepsis and antisepsis, until to-day, through the knowledge gained by the great army of medical men employed in original research, we are able to interpret as symptoms only, a vast category of disabilities the clinicians formerly classified as distinct individual diseases. For example, jaundice, dropsy, vertigo and the like, were formerly treated as individual diseases, and are pensioned as such with appropriate ratings as to the degree of disability that objectively appears to exist; but their etiology is very variable, and accordingly each case must be a law unto itself, and subject wholly to the action of the Bureau, who alone have all the evidence in a given case. For instance, in a case of jaundice, one board of surgeons may conclude the cause of disability to be the result of biliary obstruction, while another may give toxemia as the cause. Again, in the case of dropsy, one board may find a diseased heart, another pulmonary disease, and still another a diseased liver or kidney as the cause of the existing edema or dropsy. Likewise consideration of the case of vertigo, whether due to sunstroke, neurasthenia, lithemia, gastric, cardiac, or arterial disease, or to eye-strain or Meniére's disease, will depend upon the predominant objective symptoms of the above disabilities most plainly evident to the respective examining boards. There must of necessity be much difference of opinion as to the etiology of such disabilities, and modern medicine has not sufficiently enlightened us to make a distinction in every case which would be accepted unanimously.

Again, such disabilities as are pensioned under the head of chronic diarrhea, rheumatism, and asthma, vary in each individual case in their etiology and pathology, and while modern medicine has taught us much in our understanding of the causes and effects, it has not added, to any appreciable extent, to our practical knowledge from the standpoint of objective symptomatology. For example, the objective symptoms only of a claimant with chronic diarrhea will not tell us if it be due to tuberculisation of the intestinal tract in its earlier stages, or to chronic catarrhal enteritis alone. Dr. Austin Flint, in his "Practice of Medicine" of 1866, recognized tuberculosis as a cause of much of the chronic diarrhea of that time, and gives a very accurate clinical history of the objective symptoms of the disease. He did not then know that tubercle bacilli, which we are now able to detect, were the cause of tuberculosis, but he did know, from a clinical

standpoint, that such a condition of chronic diarrhea, due to tuberculosis, existed. We were not then, nor are we now, able to tell from any knowledge since gained, when a case of chronic catarrhal enteritis becomes infected by tuberculosis, but from our combined clinical and pathological experiences we know such tuberculisation to have taken place in many such cases.

The subject of asthma is also a source of much confusion. A claimant is pensioned for disability caused by asthma. The etiology, while generally considered neurotic and the pathology unsettled, is indefinitely determined in most cases. Its clinical manifestations may be bronchial, cardiac, hay, renal, or thymic. Modern pathology has given us no more light upon this subject up to the present time.

In the condition of rheumatism, certain muscles or joints may become involved, followed by endocardial invasion, with resulting embolism, paralysis, and death of claimant. Even after a period of decades this sudden and unexpected termination of life may be as clearly the true effect of a remote cause as if occurring during the claimant's actual service of a few years only. Such cases, though exceptions to the general rule, are often convincingly proven as to etiology and pathology, and are entitled to consideration by the examining surgeon and Bureau.

Likewise a malarial or typhoid infection has occurred in the service, and claimant has since suffered "spells" of infection, manifested by a febrile state of a few days' duration, preceded by chills, and each time lasting longer than before, until a suppurative gall bladder or calculus is found to exist, or an appendicitis, either of which might prove fatal without surgical interference.

Recent experiments relative to the workings of the colon bacillus, whether in the typhoid or other states of infection, have shown conclusively the cause and effect of these pathological states, and are entitled to recognition in the adjustment of claims, when disability therefrom is sufficiently proven.

The Widal test for typhoid fever, and other tests of blood and secretions, as well as the macroscopical and microscopical evidences of disease known only to modern medicine, while being of value in determining the existence of a given disease, are comparatively valueless in determining the degree of disability resulting from such diseases or their sequelæ. Modern instruments of precision, however, often aid materially in determining the degree of disability from manifest objective symptoms. There is no question of the accuracy and expertness with which the clinical observer of former times classified objective symptoms and came to conclusions relative to cause and effect of

certain diseases. They were positive in their observations and deductions until their etiology and pathology were discussed, when they became in doubt. A perusal of Flint's "Practice of Medicine" of 1866 gives as clear a clinical history of diseases therein discussed as is displayed by any writer since that time, and in his conclusions as to etiology and pathology he gets at the true meaning as accurately as was possible in his day by using the terms *"materies morbi,"* etc., in the place of "bacteriological infection" since discovered.

The classification of symptoms only as diseases is still in vogue, and no doubt after another quarter of a century many of the diseases which we consider established as to nomenclature to-day, will be considered but the symptoms of the diseases of to-morrow. This change of nomenclature is necessarily confusing to claimant, surgeon, and Bureau.

Not the least in the category of disabilities to call for the closest observation and the most skillful tests of the examining surgeon, are the disabilities enumerated under the head of "diseases of the nervous system," such as neurasthenia, nervousness, etc., at present only symptoms. They may mean much, and they may mean but little. Dr. Hugh T. Patrick says: "If you will stop for a moment, take your finger from the pulse, and your hand from the scalpel, your eye from the microscope and your thoughts from the microbe, I think that you will agree with me that these trivialities contribute quite as much to human suffering and disappointment as do the infections, inflammations, and neoplasms in the long category of human pathology." Many are the soldiers, broken nervously, whose condition cannot be described by objective symptoms better than in the above language of Dr. Patrick. However, these unfortunate cases, together with a long list of those of idiosyncrasy, must be necessarily reviewed as exceptions, and do not come under the rule of rating for disability from objective symptoms alone. The misfortune to the worthy pensioner of a misnamed disability is unfortunate and difficult to remedy.

It cannot be gainsaid that much difficulty of technical administration of claims, both relative to nomenclature and etiology and pathology of disease, existed in the earlier disposal of pensioned disabilities. Also that rulings of sequelæ, applied to every disease, based upon medical opinion from theoretical knowledge alone as to etiology and pathology, gave the average claimant for pension the advantage over the Government and the intent of the law. However, since the Bureau has applied a more rigid system of requirements in examination, holding each case strictly to a technical interpretation of the etiology and objective symptoms of disease, measured by modern

pathology, the Government has regained the advantage previously lost to the claimant or pensioner.

In conclusion we find, (1) that symptomatology is as accurately defined by former observers as by those of to-day; (2) that nomenclature changes with the progress of original research, making many of the classified diseases of to-day the symptoms only of the diseases of to-morrow; (3) that surgery, pathology, and bacteriology have so enlightened "Internal Medicine" that its objective symptoms are now much better understood and can be more technically applied in the consideration of most cases of disease and resulting disability.

DISPLACEMENT OF THE UTERUS*.

BY GUSTAVE A. KLETZSCH, M. D.
OF MILWAUKEE.

My remarks on this important subject will only be introductory, as it would be impossible to treat of displacements of the uterus, in the short space of time allotted to each paper.

There are also several factors which must be considered, even if only in a general way, before an intelligent discussion of this subject can be undertaken. The most important of these is the anatomy of the pelvic region. A clear understanding of the gross anatomy of the parts, within or without the pelvis, must precede the study of uterine displacement. The position of the organs in the pelvic cavity is dependent upon their co-relationship to each other, and anything which disturbs this brings us to the next factor which will enter into our paper, the cause of displacements. The methods now employed to again remedy the defects which were produced accidentally or resulting from physiological processes, is the third factor to be considered.

The pelvis is made up of strong bones, and is well suited for the protection of the generative organs of the female, which are placed within its cavity. On the outside, the pelvis is covered by layers of fascia and muscular tissue, which form the strong walls of the lower part of the abdomen where they form the anterior wall of the false

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 3, 1904.

pelvic cavity; at the lower extremity of the pelvis, they make up the perineal surface. The inside of the cavity of the pelvis is lined by strong layers of fascia, cushions of fat and thick bundles of tonic muscles. From the walls inside, there is stretched across the outlet of the pelvis a dense layer of fascia, made contractile by a thin layer of muscular tissue, the whole acting like a diaphragm, closing the lower end of the cavity of the body. Through this diaphragm the rectum, the uterus and the neck of the bladder pass to open below; to its under surface the upper part of the vagina is firmly attached, the lower end of which is supported by the perineal tissues

The cervix projects through the pelvic floor into the upper part of the vagina and is firmly attached to the pelvic fascia and base of the bladder in front. The body of the uterus projects upwards and lies free in the true pelvic cavity.

By this arrangement of the parts, the uterus is supported in a mechanical way, resting on a drum membrane, which is in turn supported below by a tube-like passage, that rests again on strong fascias and muscular tissues. When displacements of the uterus are discussed, this anatomical arrangement of the pelvis must be considered. It is, however, usual, and I might say general, that this is never thought of and that our whole attention is given to the so-called supporters of the uterus, the ligaments.

So far but slight reference has been made to the ligaments of the uterus, which are solely made up of reflections of the peritoneum from its sides. All the ligaments of the uterus are lax folds and not tense bands. They do not hinder the normal mobility of the uterus in any direction. The peritoneum as a whole, however, gives a mighty support to the uterus. It covers the entire posterior surface of this organ, body and neck, and all of the anterior surface of the body. The membrane is loosely attached to both surfaces. Over the fundus of the uterus the peritoneum is firmly united to its muscular walls, and it is here furthermore strengthened by thick fasciculi of muscular tissue, which intimately unite with the muscular walls of the uterus.

The peritoneal covering of the uterus and the reflections from its walls, give us the second factor which must be considered in the support of the uterus.

In addition to the mechanical and peritoneal support of the uterus, there is a third important inherent property of the uterus and pelvic tissues which requires consideration, and that is their elastic and contractile nature. The elastic properties of the pelvic tissues are very well shown when the fetus leaves the cavity of the uterus and

passes through narrow passages to gain the outside world. The contractile properties are demonstrated in the expulsive efforts made by these parts during the progress of labor and in the return to their normal status soon after labor is completed.

The natural position of the uterus is within the true pelvic cavity. The body of the uterus is slightly flexed upon the cervix, the former lying lightly supported on the bladder, the latter projecting through the pelvic floor into the vagina. The uterus has no fixed position. The cervix is its most fixed part, because this has firm attachments in front to the base of the bladder and pelvic floor. But with each respiratory act the uterus moves upward and downward, owing to its attachment to the pelvic diaphragm. Every time the bladder is filled and emptied the body of the uterus rises and falls, the junction of the body with the cervix being the seat of flexibility. The position of the uterus is never fixed. The mobility of the uterus is physiological and necessary to keep the parts in their proper tone. So long as the position of the uterus is in its normal plane in the pelvic cavity, this physiological motion is kept up. As soon as the uterus drops out of this plane, this motion is interfered with and the nutrition of the parts suffer.

There are many causes which disturb the natural position of the uterus in the pelvis or affect the inherent properties of the parts. It would take up too much time to consider separately all the causes which can produce uterine displacements. In this paper I will devote my remarks wholly to retrodisplacements following labor, miscarriages, and abortions. As the large majority of women go through one or all of these processes a number of times during their lives, this may account for the many cases of retrodisplacements we meet with in practice.

Labor is a perfectly physiological act, and yet there result from it many cases of retrodisplacements. The cause of this may lie with the patient or with the attendant. With the best of care we have labor cases which result in retrodisplacement of the uterus intractible to treatment.

A normal labor should have no such results; a precipitate labor or a protracted labor may have. A precipitate labor does not give enough time for the parts in the pelvis to dilate and the tissues are lacerated rather than distended in the act of expulsion of the child. A protracted labor, on the other hand, keeps them overdistended too long and the parts do not return to their proper tone after the passage of the child. In the one case, the main support of the uterus is broken; in the other, the tone of the parts is lost and the relaxed con-

dition of the tissues allows of displacement. A precipitate labor is not under our control; a protracted labor can be obviated. The intelligence of the attendant must here determine the proper time for interference, and help for the patient. Too early application of the forceps is as bad as too late. Both of these conditions of labor give us many cases of retrodisplacements, but the majority of these cases result from the use of forceps. In the very best of hands the forceps frequently produce irreparable injury. What may they not do in the inexperienced hand? It is not in place here to take up mechanical delivery, but I can refer to the after-care of the cases which are confined precipitately, and to protracted and forceps cases.

A miscarriage is the next fruitful source of retrodisplacements. Undoubtedly many women desire to prevent miscarriages; others are glad when they take place. From whatever reason, however, the after-treatment ought to be the same as in a labor case. Whenever the process of uterine gestation ends in full labor, the parts are previously prepared for the expulsion of the fetus. When uterine gestation is cut short, the fetus is forced out of the uterus under abnormal conditions. We give the parts time to recover after labor and frequently do not give any attention whatever to the pelvic parts after a miscarriage. For the welfare of the woman the after-treatment of an abnormal parturient process is much more important than that of a normal labor. On the other hand, the occurrence of frequent miscarriages should call our attention to the woman, and an effort be made to determine their cause; this cause inducing the miscarriage should then be removed.

Labor and miscarriages are met with in married woman. Abortions are more commonly met with in the unmarried. The forcible induction of labor, at whatever stage of uterine gestation, is a severe undertaking. I firmly believe that it not only affects the parts locally, but that it has an unwholesome influence on the woman in general. Disturbance of the growth of the embryo or fetus in utero must decidedly affect both the circulatory and the nervous system of the woman. Even if no infection results and no inflammatory process is set up, the nutrition and innervation of the generative organs must be banefully influenced.

The results of uterine gestation can influence the production of retrodisplacements in several ways:

1st. By laceration of the parts, either the cervix, the pelvic floor or the perineal support.

2nd. By overdistention of the pelvic tissues, which results in a consequent relaxation which allows the uterus to fall out of the normal plane.

3rd. By subinvolution of the pelvic organs and tissues, which not only leaves the uterus large and weighty, in which condition it cannot hold itself in place, but also weakened in strength, which applies both to the uterus and more so to its supports.

4th. When infection occurs, whether of the uterus or of the adjacent parts, this also weakens the uterus as well as the pelvic tissues, and displacements more easily result.

5th. Any inflammatory process of the serous covering of the uterus results in adhesions, which later cause displacements.

What rôle does prophylaxis play in the production of retrodisplacements? With care on the part of the attendant much can be done to avoid the conditions which directly induce displacements of the uterus. Undoubtedly a great deal of mismanagement during labor can be cited. The attendant ought to study the individual case and apply the right course for each. When forceps must be used, the greatest care ought to be exercised not to do harm to the tissues. After a forceps delivery the patient should be cautioned to observe rest and quiet, until the pelvic organs and tissues are again restored to their normal condition and tone.

In any case of confinement, whenever feasible, nursing the child at the breast of the mother ought to be recommended. The act of nursing at the breast certainly stimulates the uterine contractions, thereby reducing the size of the uterus more quickly and also improving the circulation and the tone of the pelvic issues. Too protracted nursing is, on the other hand, detrimental to the health of the pelvic organs and tissues. In young women premature atrophy of the parts results, bringing on the menopause, and superinducing displacement of the uterus very easily.

The treatment of retrodisplacements of the uterus may be local and operative. The local treatment restores all the pelvic organs to a healthier state and gives a better tone to the pelvic tissues. The operative treatment simply removes a malposition of the organ, without affecting the condition of the parts. I believe in a long course of local treatment preparatory to an operation. During this time, we frequently find other means by which the patient is relieved of her trouble and need not go through the dangers of an operation. It is seldom that we find an uncomplicated case of retrodisplacement of the uterus. Acute or chronic inflammatory processes usually accompany the malposition, and their removal by well-directed local treatment not only restores the pelvic tissues to the normal status, but improves the general health of the patient. If the malposition of the uterus cannot be relieved by local treatment, then an operation is in place and will also be more effectual.

I take the decided stand, that every effort should be made on the part of the physician to correct a malposition of the uterus. This organ belongs in a certain position, and when from any cause it deviates from this position, the general health of the patient will sooner or later suffer. But I also firmly contend, that the malposition alone is not the only reason for all of the patient's symptoms. The lacerated, subinvoluted and relaxed pelvic tissues contribute their full quota to the ailments recited. Furthermore, we know that a retroversion or flexion is the first step toward a prolapse of the uterus. It is hard enough to correct a retrodisplacement, and much more difficult to overcome the conditions which are present in prolapse of the uterus.

The form of operation for retrodisplacements of the uterus depends a great deal upon the case.

1. The original Alexander's operation ought only to be done in cases of pure displacements only; if complicated by adhesions or procidentia this operation will fail.

2. Vaginal fixation may bring the body of the uterus forward, but it destroys one of the main points of support for the uterus, *i. e.*, to the base of the bladder and to the pelvic fascia, and this, in time, must allow the uterus to sag downward.

3. Suspension or fixation to the anterior abdominal wall may raise the uterus above the plane of the pelvis on which it normally rests, and may also fix the fundus unnaturally. But to my mind, this is the best operation for the great majority of cases. It must be supplemented by repair of any lacerations which are present, either of the cervix or of the perineum. Alone it will prove a failure; combined the two will give good results.

Discussion.

DR. A. J. PULS, Milwaukee—I concur in most of what the writer has said, but I do not favor prolonged vaginal treatment in cases requiring operative interference. There are cases of retroversion and later displacement of the uterus in which the symptoms can be easily relieved by the tampon treatment, douches, rest in bed, massage and depletion of the cervix, and then a good-fitting pessary, worn for a short time, will hold the uterus in place; this is especially true in acute cases following child-birth. I hold that it is our duty to examine every woman whom we have confined, during the fifth or sixth week of the lying-in period in order to correct a displacement of the uterus if this pathologic condition is found present.

But in cases of chronic inflammation, where the uterus has become fixed as the result of local peritonitis, it is the best policy to advocate an operative procedure, and I would advise an abdominal operation on account of the view which one has of the uterus and its appendages and the ease and the readiness with which the uterus can be placed in a normal position and secured by sus-

pension to the abdominal peritoneum. The suspended uterus need not give the patient any trouble later; even if gestation takes place, labor is comparatively easy and no disturbance is noticed during pregnancy.

There are some cases, however, although amenable to this mode of treatment, that are apt to have a recurrence of the displacement; whether this is due to the difference in the build of women, or whether the patients have not taken proper care, I am not able to state, but I have noticed a return of the retroversion in a certain class of women in whom the uterus had been suspended, and since then I have selected the cases which promise better results where the vaginal route is chosen by suturing the uterus to the vaginal membrane. Vaginal fixation is preferable, especially in women who are of a slender build and in whom the plane of the pelvis seems far away from the anterior abdominal wall. It is in this class of women that I favor the vaginal operation, not the method that has been advocated in former years by Schuecking or that of Mackenrodt, although both have modified their operation later—their original methods having fallen into disrepute because labor was difficult and often impossible. The method, however, of opening the vaginal vault anteriorly and separating the bladder from the uterus and pushing it upward out of the pelvis, allows the uterus to be sutured just above the internal os to the vaginal membrane in its normal position, a space which we find the uterus to occupy when the bladder is empty. I have never found any trouble following this operation, either that the patient complains of bladder trouble or that this position incommodes her in any way. Of course in doing this operation you can, if necessary, repair both the cervix and the perineum whenever relaxation of the vaginal outlet is found to be a secondary cause of the displacement.

DR. F. SHIMONEK, Milwaukee—I do not know that I can enlighten you very much on the subject of retrodisplacements. Dr. Kletzsch discussed the prophylaxis of retrodisplacements and has covered the field very thoroughly; Dr. Puls touched upon the surgical feature of it. There is, however, one other feature, I think, that I might say something about, and that is in reference to the difference between retroflexions and retroversions. There is quite a marked difference in the pathology of those two diseases, and consequently quite a little difference in their treatment. Retroversions usually occur in women who have not been infected. It may be the result of mechanical forces, such as jumping from a height, causing a sudden displacement of the uterus. We find also retroversions of the uterus of gradual development in girls, or in unmarried women who are in the habit of allowing their bladders or rectums, or both, to over-distend, thus causing a gradual conversion of an intermittent, or in other words, a physiological retroversion into a pathological one. There may be, also, a gradual relaxation of the stays of the uterus, from general debility or other reasons. The retroflexion, as the term indicates, is a bending of the uterus upon itself backwards, and it requires a pathological condition of the organ itself in addition to disease of the ligaments or adnexa or both. It presupposes a diseased uterus; such a uterus is soft, therefore not able of its own accord to remain in normal position, and that this condition of things requires different treatment than the other, is self-evident. I still believe in the use of the pessary. In retroversion of the uterus, I think a mere displacement of the uterus and supporting it in position by a well-adjusted pessary, is all the treatment the case requires, so far

as that condition is concerned. Constitutional conditions, such as general debility, etc., require treatment.

I think that the various surgical operations, such as shortening the ligaments in Alexander's operation, or ventrofixation, are not only out of place, but should be severely condemned in retroversions in unmarried women, or married women who are still in the generative period. They most certainly interfere with labor because they interfere with proper development of the uterus. These operations flex and fix the uterus in an abnormal position; the result is a faulty development of the uterus during pregnancy; the development is at the expense of the posterior wall, which becomes very thin, so that it sometimes ruptures during labor, while the anterior wall becomes thickened, thus interfering with normal progress of labor by irregular uterine contractions, which may be a reason for a difficult labor, or an insurmountable obstacle to delivery.

Since retroflexions are of different significance, they require wholly different treatment. Simple retention of the uterus in proper position in those conditions is not sufficient. We may have as complications, perimetritis, perisalpingitis, and perivaritis—all being results of infection requiring very careful and intelligent treatment, before the uterus calls for any special treatment. Simply placing the uterus in position will do no good. In addition to this, constitutional treatment is of very great importance. The patient must have as good digestion as possible, and the bowels must move freely. In all infectious conditions of the uterus and adnexa, evacuations are of very great importance. The intestinal canal may be regarded in the light of a drainage tube, and by thorough elimination it is possible to carry away much infective material; so that I would place constitutional and local treatment first, and then if necessary and called for, surgical treatment might be resorted to with great benefit. A retroflexed and consequently soft uterus should *not* be treated by a pessary. This would almost surely aggravate the flexion, increase the congestion, diminish drainage, thus making the condition much worse.

DR. O. THIENHAUS, Milwaukee—From the remarks of the gentlemen who have spoken, I see that unfortunately nobody was present at the last meeting of the American Medical Association, where this subject was brought up for discussion. Therefore I would like to repeat what I said in regard to the operative interference and methods of operation for retroflexion of the uterus. At this meeting the remarks which I made in the discussion before the gynecological section were as follows: The uterus does not belong in the abdominal cavity but in the pelvis. Why do we then fix or suspend it in an abnormal position against the abdominal wall when we have other operative procedures which leave the uterus in its normal position in the pelvis and at the same time are—what all operators who have had any experience in vaginal operations concede—less dangerous and of much greater advantage for the patient, so far as the immediate and remote results are concerned.

Bovée, of Washington, cited a case at this meeting, in which he used abdominal suspension as a means of cure for retroversion; but it was not long before the womb was hanging out of the vulva, for which malformation Edebohls, of New York, later on had to perform a vaginal hysterectomy. I think we have had quite enough of *abdominal* suspension for such cases, and women would hardly allow such an operation if they knew there are other methods,

safer and much better so far as the immediate and remote results are concerned. Whether one uses vaginal shortening of the round ligaments, or vaginal suspension, is a personal matter of like and dislike.

I usually use the Martin-Mackenrodt method of vaginal suspension. It has been said, in opposition to the vaginal operations for these cases, that they are too difficult, and in last year's volume of the *British Medical Journal* a writer on this subject pointed out that these vaginal operations could hardly be used by the practitioner because of the difficulties. This may be true, but for the specialist difficulties must never be a barrier against an operative method when it is shown that this operative method has advantages over other methods as regards the safety of the patient and the immediate and remote results.

DR. A. J BURGESS, Milwaukee—I wish the writer had taken a little time to tell us what he means by local treatment, in order that he might, as I believe he would, condemn the local treatment by intrauterine applications of various kinds, which are continually infecting the pelvic organs.

I was glad to hear Dr. Shimonek discriminate in what kind of cases he would and would not use a pessary. I recall an instance where I made a post-mortem examination on an anemic girl here, where there was a pessary behind a uterus which was about four inches long. The whole uterus was flabby and thin, and the top of it hung over the pessary like a wet dish-rag over a board fence. Of course the pessary did no good whatever.

The reader of the paper spoke only of those cases of retroversion which occur after labor, abortion or miscarriage. Of course many of these cases have existed from childhood and they do not all give symptoms if the general health is good. It needs a very nice discrimination as to the treatment of these cases—nicer even than in the cases that have been discussed, of hemorrhage insid eof the skull. Operation is not a panacea for this disease. I think the way to approach this condition of things is from the neurotic side, from the side of the general health. Mrs. Jones walks out in the evening and sees her neighbor's house is so much bigger than her own, that she goes home and urges her husband to build a bigger one, which he does. Then she stays in the house all the time, has little fresh air, gets in the habit of eating chocolate chips for food, becomes constipated; her digestion is ruined; anemia and nervousness begin, and she becomes a victim to the house disease, which is one of the most miserable yet preventable of diseases.

The uterus and ovaries are organs of great importance to the life of the race. Therefore they are richly supplied with blood vessels and nerves and when woman's health becomes impaired they became sensitive; she goes to a gyne- a woman's health becomes impaired they become sensitive; she goes to a gynecologist, suffers from retroversion which previously gave no symptoms, and case of this kind. The first thing to do, if the gynecologist is not a physician, is to send her to a physician who will direct her in a course which will make her health better. Then if she is not well, the time has come to consider whether an operation is necessary.

DR. WILLIAM F. FAIRFIELD, Green Bay—I am not an obstetrician, I attend very few obstetrical cases, yet I want to call your attention to some of the treatment that is adopted by the medical profession and by obstetricians generally in the care of puerperants; and I want to ask you the question

whether there is anything more asinine in the practice of medicine than that which is usually followed in the case of labor at term or in the case of an abortion. We will consider the case of a woman who has had a labor at term; she is a perfectly healthy woman; has been around and attending to her household duties during the nine months of pregnancy. She suddenly is taken sick and put to bed. The physician comes there, makes an examination, delivers the woman, we will suppose, in a scientific and up to date manner, using forceps or not as he sees fit; but the chances, however, are nine out of ten, that after he has delivered the woman he advises her to lie upon her back with her feet very close together for fear that that little laceration which has occurred will not unite. For fear she will have a few after-pains he administers an anodyne, usually Dover's powders or morphia. He binds up the bowels and puts on a bandage so tight that you cannot get your little finger under it.

Now if you can conceive of a position in which you can place a patient in which you would be more apt to have retroversion of the uterus than that, I would like to know it. The cause of retroversion is subinvolution in a majority of cases, and the cause of that is infection, and you cannot get a woman in better position to continue subinvolution than that very position. The binding up of the bowels, the accumulation of a large mass of feces in the rectum with the woman lying on her back, induces just exactly the condition that we should not have. Is there any reason why a woman should not turn on her side or face after confinement? Is there any reason why she should not be raised to a sitting posture? None in the world. I do not see why a woman should not be raised up in a position where you could get drainage of the vagina; nor do I see any reason for a physician making five or six visits after the confinement, just to go in and say, how do you do, examine the pulse and take the temperature. He should know something about whether there is retroversion or retroflexion before he leaves the case. You will find a good many cases that have back-ache and all the symptoms of obstruction of the bowel, constipation, etc., that are relieved by simply turning them on the face and letting them lie in that position for a while. This bandage that is put on women is a relic of the dark ages; and there is no reason in the world why the puerperant, as I said before, should not be put into a sitting posture, commencing on the day following delivery.

A naturally heavy, hollow organ, from which the contents have just been expelled, cannot be expected to maintain its normal position when the patient is forced to lie upon her back for ten or more days and subjected to such influences as that exerted by both the bandage and a loaded intestine. Again, an examination post partum is as much the duty of the physician as is an examination ante partum, and if oftener made, would result in the delivery of many incarcerated uteri from behind the sacral promontory.

DR. I. D. MISHOFF, Milwaukee—In the treatment of this disorder, retroversion and retroflexion, I would like to call attention to the use of electricity. Now so far as I have had experience in 13 years, with those people that have come to me with retro-displacement, I have had no case but where the uterus was two or three times the natural size. Will you tell me, gentlemen, what good any operation would do to such an organ when it is itself diseased? We are advised not to wait long, to treat the uterus, to bring it to a natural condition. After you have fixed it here or there, it matters not where, I do not

think it will do it very much good. You might take it out—a good many do it—but what you need first is to do something to make that organ become natural. What is the first means of improving the condition of the organ? Why, to attend to the question of blood supply. Another thing we never hear of is the nerve supply; and still another thing: some one wrote of the abdominal brain. I would like some one to write a book on the brain that governs the different organs. If the brain that has charge of the uterus is diseased, will you please tell me what good will come if you fix the uterus, or even if you remove it? You have removed it, but you have left the brain that had charge of it; but this brain is diseased. Now if there is a blood clot in the head we are advised to open the brain; but if the brain that has charge of the womb is diseased, we are asked to say nothing about it.

Now my advice is to use electricity internally. There is no danger of infection by applying electricity *in loco*, and we really become manufacturers of medicine for the walls of the uterus, and infection is actually prevented.

IMMUNITY AND ITS RELATION TO SURGICAL PATHOLOGY.*

BY J. M. DODD, M. D.,
ASHLAND, WIS.

It is not my purpose to attempt to throw any new light on a subject just now absorbing the attention of some of the brightest minds of our profession, but, in the limited time at my disposal, to present a few reflections which come to the busy practitioner in the course of a practice which brings much to be done and yet leaves so little time in which to do it.

When we consider the subject of immunity and its allied physical laws, we approach a vast realm in which explorations are just beginning to be made and whose secrets, when revealed, will doubtless make medicine what we hope to have it—an exact science.

We observe in nature a peculiar individuality of species and of individuals of different species, so that there are no two exactly alike, which demonstrates the presence of a peculiar principle which is favorable to self, but antagonistic to others and pervades the whole organic world from the microbe to man.

It is this that makes immunity possible. Bacteriology has demonstrated that an incessant warfare is being waged between the different species of organic life—each striving for the mastery and influencing

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 4, 1903.

either favorably or unfavorably the medium in which the organisms meet.

Acute disease in man is the result of invasion of his body by bacteria, which, from want of the immunizing principle, he is unable to resist.

The presence of invading germs within the body stimulates the production of the immunizing principle, and the course of acute disease is determined by the readiness with which this principle is produced. A strong healthy man may be taken ill with typhoid fever or acute sepsis and die within a week or after a prolonged siege during which nearly all the available energy of the body is exhausted; or, the invaded organism is victorious and recovery takes place. In the first place the toxines are produced more rapidly than the antitoxines and the garrison is overpowered by one grand charge of the invader. In the last case the defending forces, by virtue of their strength, are able to hold out until the besieging germs are exhausted largely by their own toxines.

In some cases resistance is scarcely produced at all and the vitality of the invaded body is soon overcome and death speedily ensues. On the other hand, slowly and after a more or less prolonged period, recovery may ensue.

The activity of disease-producing germs in the body is controlled by the production of antitoxines with which the tissues of the body become impregnated, and when the resisting principle is sufficiently strong, disease-producing bacteria may be eliminated from the body without producing any disturbance of function whatever.

We know that it is not the mere presence of the germs which causes symptoms of disease, but it is the absorption of and circulation in the blood of the toxines of the germs which produces poisoning of the nerve centers and consequent perversion of function or pathological tissue changes.

All forms of organic growth and development are accompanied by the production of waste matter. In man we call it excretion; in the bacteria we call it ptomaine or toxine. The natural or acquired resistance of the host to the invader we speak of as antitoxine, and the antitoxines constitute the immunizing principle.

As man could not long exist confined in the presence of his own waste products, neither can any other organic being do so.

Disease germs are governed by this law of nature and when invading another organism are antagonized by their own toxines as well as by the antitoxines of the host.

The contents of an abscess of long standing are less virulent

than an acute one, such as a boil or felon. In the first instance the germs are confined in a cavity with their own products until they are devitalized by them, while in the other they are still being nourished by the surrounding pabulum of the host and their vitality is not yet impaired by their own waste matter, nor has the resisting principle of the host yet inhibited the development of the germs. Invasion of tissues in which an acute inflammatory action is in progress often results in increase of the inflammatory process, evidently because we thus open up new portals for infection, new channels for absorption of toxins, lower the vitality of the tissues incised, furnish fresh pabulum for the germs and thus accelerate the very condition we aim to relieve.

On the other hand, an acute inflammation rarely results from incising a chronic abscess though the discharging puss flows over freshly cut tissues.

It is a popular idea among the laity that a boil should not be opened too early, and there seems an element of reason in their claim, as has been pointed out above.

It is this principle that, nowadays, makes us slow to operate in acute appendicitis or tubal inflammation. Those of us who have operated on these cases know how liable we are to get a general peritonitis where there was only a local inflammation before, and that this liability diminishes as the case progresses, and as a rule old cases are more promising for operation than are acute.

We also know that nature will sometimes take care of these local inflammations even after we become satisfied that rupture has taken place and that the inflammatory products are present outside the tube, if we bring about intestinal antisepsis, rest and measures tending to promote natural tissue resistance.

It is here that a question is suggested. Does the withdrawal of blood from an acutely inflamed tissue relieve or increase inflammation? We have seen it do both. I have seen local depletion by means of multiple puncture arrest the progress of a septic process along the lymph channels of the arm starting from an infected wound of the hand—the puncture being made with a small narrow-blade knife so as not to seriously impair the vitality of the tissue area operated upon, while free incision in the same condition would only accelerate the local inflammation and increase rather than arrest the lymphatic involvement.

Does the removal of tissue fluids carry away sufficient toxines to balance the loss of blood and antitoxines withdrawn? The blood is regarded as the natural antiseptic agent of the body, and must be so for it is Nature's first effort to send all the blood possible to the point of invasion, causing heat, redness, swelling and pain of distention, and giving the classical cycle which the ancients termed inflammation,

expressing to their satisfaction their observation of the phenomena present.

We now know that inflammation is something more than a mechanical distention of the affected tissues, and that there is a physical and chemical process going on due to foreign cell production and consequent poisoning of the invaded tissues by resulting toxines.

Leucocytes are sent out from the capillaries into the tissues as an advance guard to locate and destroy the invader. They are either victorious and inflammation is averted or arrested, or they themselves are destroyed by the germs or their toxines or both, and the progress of the disease continues leaving in its wake a mass of dead leucocytes, which we observe as pus.

Prolonged inflammation results in wholesale destruction of leucocytes and often tissue cells as well. A pus focus represents the battle ground of the leucocytes and pus germs, and the pus the carnage wrought. Dead leucocytes becomes foreign bodies in the tissues, their rapid accumulation causes a separation of the tissues and the formation of a cavity extending in the direction of least resistance.

Free incision of inflamed tissues followed by chemical cauterization of the freshly cut edges with carbolic acid allows escape of inflammatory products, and the cautery closes the open portals of infection so that relief follows. The same course without cauterization will, in most cases, accelerate the inflammation and seems to prove that destruction of the power of absorption in the freshly cut tissues is the cause of the improvement which follows.

The pathologists tell us that the immunizing principle is derived from the cells and resides in the cells and its power exerted by the phagocytes, while others claim that it is antitoxic and is present in the blood serum and tissue fluids. Both are probably correct. Whatever it may be it is a variable quantity and is possessed in variable degrees by different individuals, this degree varying in the same individual at different times.

Some people go through life apparently unaffected by the germs of acute disease. The soil has not been favorable or the immunizing principle has been too strong for them to grow and develop in sufficient numbers to cause symptoms of their presence.

There are others who take all the epidemic acute diseases beginning with infancy and continuing throughout life, while still others will take few or many varying between the two extremes. Some diseases protect against subsequent attacks, while others render the victim more susceptible to the same disease.

That disease germs are always present is not now doubted, and it seems equally true that they can only grow when conditions are favorable, such as lowered resistance or depressed vitality of the tissue cells caused by natural susceptibility, mal-assimilation, auto-intoxication, or perversion of function.

The success of aseptic surgery can hardly be attributed to the absolute exclusion of bacteria from operative wounds, since that is practically impossible. It only demonstrates that the antiseptic power of the tissues is able to destroy and neutralize the toxines of a limited number of germs, therefore antisepsis is necessary where antisepsis is not possible within physiological bounds.

Two diseases can but rarely exist at the same time in the same person. One germ says to the other species by means of its toxine, "You must stay out until I am through," and should they by chance co-exist they may excite the production of an immunizing principle antagonistic to both; so, for instance, typhoid fever has been known to cure tuberculosis, vaccinia impairs the susceptibility to smallpox, the streptococcus of erysipelas is curative in sarcoma.

In attempting to consider the subject from a surgical standpoint one is impressed with the want of distinctness of the line dividing medical and surgical pathology, and I continually find myself wandering well beyond the border line on both sides. In fact one may be excused for this for the reason that no one has yet drawn a satisfactory line.

In the treatment of infections due to germ invasion whether the case is to be treated medically or surgically, one of the two things or both must be done. We must reinforce the invaded body or weaken the invader. Herein lie first principles of treatment—how these objects are to be attained. Physicians and surgeons should agree after a careful consideration of all the principles involved.

Surgery is no longer the mechanics of medical science. He who aspires to be a good surgeon must first be a good physician and be well versed in the principles underlying physiological chemistry and the life history of all cells.

We may hope that the investigations of the laboratory will show us the true course of treatment to pursue, and viewed in our present light we may believe that a clear understanding of the principles of immunity will point the way to successful diagnosis and treatment of all diseased conditions.

Physiological chemistry will, no doubt, solve the problem of immunity, and even now many of the brightest minds of the profession are working along this line and have already given us some ingenious hypotheses that are doubtless true, yet which are not the whole truth. In this fascinating field of research we have much to anticipate, many phenomena to observe for which we are unable to account, and must plod along with an ever present sense that our work is still far from perfect.

The treatment of disease is largely empirical, and the result sought cannot be foretold with promise or accuracy. The problem of vital resistance is yet unsolved.

WISCONSIN MEDICAL JOURNAL.

OFFICIAL ORGAN OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A Monthly Journal, published by the Wisconsin Medical Journal Publishing Co., and owned by and devoted to the interests of the Medical Profession of this State.

Original articles, Clinical notes, Correspondence, and Communications of interest to the Medical Profession are solicited. Reprints of articles contributed to this Journal will be furnished at cost price, but a number of copies of the Journal will be furnished contributors gratis. All manuscripts should be typewritten.

ARTHUR J. PATEK, A. B., M. D., Editor,
121 Wisconsin Street, Milwaukee.

Associate Editors.

CHAS. S. SHELDON, M. D., Madison.
HOYT E. DEARHOLT, M. D., Milwaukee.
OTTO H. FOERSTER, M. D., Milwaukee.
ALBERT W. MYERS, M. D., Milwaukee.

Collaborators:

Horace M. Brown, M. D.,	Milwaukee	U. O. B. Wingate, M. D.,	Milwaukee
Arthur J. Burgess, M. D.,	"	Chas. Zimmerman, M. D.,	"
Richard Dewey, M. D.,	"	Frank H. Edsall, M. D.,	Madison, Wis.
Louis Frank, M. D.,	"	W. E. Fairfield, M. D.,	Green Bay, "
Walter Kempster, M. D.,	"	Wm. E. Ground, M. D.,	W. Superior, "
William Mackie, M. D.,	"	Julius Noer, M. D.,	Stoughton, "
Solon Marks, M. D.,	"	Chas. W. Oviatt, M. D.,	Oshkosh, "
P. H. McGovern, M. D.,	"	L. H. Prince, M. D.,	Palmyra, "
Gilbert E. Seaman, M. D.,	"	H. Reineking, M. D.,	Sheboygan, "
Wm. H. Washburn, M. D.,	"	W. T. Sarles, M. D.,	Sparta, "

Annual Subscription, - - - $1.00. Single Copies, - - - - - $0.10.

Address all business communications to
M. M. TAYLOR, Business Manager,
709 Herman Bldg., Milwaukee, Wis.

CHICAGO OFFICE:
J. L. McKENNA, Commercial Nat. Bank Bldg.
175 Dearborn Street.

Vol. II. OCTOBER, 1903. No. 5.

EDITORIAL COMMENT.

THE PROGRAM OF THE STATE SOCIETY.

In publishing elsewhere in this issue the preliminary announcement of the Program Committee of the State Society, we wish to commend the stand taken in the matter of limiting the number of papers, so as to allow of a wider and more general discussion. During the past few years, notwithstanding the curtailing of the program over previous years, it has usually been necessary to shorten the discussion

towards the end of each session. As the discussion which follows the reading of a paper, is, it is generally conceded, the main object of these gatherings, it should be both thorough and complete. One may read the papers published in our many journals and yet miss valuable points that the critical minds of keener intellects may more clearly elucidate during a discussion.

A difficulty with which the Committee will have to contend will be presented should papers be submitted largely in excess of the number set as a limit. The Committee, however, must necessarily use its discretion in the matter of selection, with a due regard not only for excellence, but also with a view of covering the large field of medicine and surgery, and giving to the Society a program rich both in the value of its material, and in its breadth of view.

Under the new by-laws "The Committee on Scientific work consists of three members, of which the Secretary shall be one." On the whole, this may be considered a move in the right direction, for, while it centralizes somewhat the power of this committee, its tendency is unquestionably towards the expedition of business, by doing away with a cumbersome and unnecessarily large program committee.

We wish the Committee success in its effort and desire to make the coming meeting not only memorable as being the first under the reorganization, but also on account of the high character and excellence of the material which it hopes to offer the Society for its consideration.

TYPHOID INFECTION.

The undesirability of using well water for drinking purposes was again recently demonstrated in this city when, upon an analysis of water used by several patients suffering from typhoid fever, it was discovered that the water used was infected. No cases followed the filling up of this well.

The typhoid epidemic in Racine has, so far as we are aware, not yet been traced to its source, but undoubtedly the contagion is to be found in an infected water or milk supply, and, if diligently searched for, will be discovered.

The cause of a similar epidemic was recently inquired into in Philadelphia. Here the milk supply was evidently at fault, for of 78 cases that occurred in one ward, 41 were found to have purchased their milk from a single dealer, and two cases were known to have existed in this household. We have recently learned that a case of typhoid fever existed in the family of a milk dealer living without the city limits, but distributing milk within the city. Although the

Health Department acted at once upon this information, it is probable that we will soon hear of cases developing in this dealer's route.

This emphasizes a point given some prominence not long ago, namely, that pasteurization and sterilization methods will never be sufficiently effectual barriers against disease—in so far as bad milk may be a factor in its causation—until the dairies situated without the city's corporate limits and distributing milk within the city are under municipal control. Eternal vigilance only is the price of safety.

REDUCTION IN INFANT MORTALITY IN NEW YORK.

The *Medical News* of Sept. 5, 1903, contains an article by Dr. R. G. Freeman, on "The Reduction in the Infant Mortality in the City of New York and the Agencies which have been Instrumental in Bringing it About." Some startling figures are given, and graphic charts assist a proper appreciation of the results accomplished. While the steady reduction in mortality during the past few years is not charged entirely to the activity of the changing city administration, yet the impetus which an eye to the health of the city on the part of the administration gives private individuals, and the force it lends to enterprises having infant health in mind, are unmistakable. Therefore, with an efficient health department, we are not surprised to find that there is an ever increasing and fruit-bearing interest taken in the infants' welfare, and that new "guilds" and other charitable organizations are taking up the matter of summer feeding. Among the various causes enumerated as bearing upon the improved conditions, are: City administrations, sterilization of milk, milk inspection, Strauss milk charity, St. John's Guild, other fresh air charities, street cleaning, garbage and refuse removal, diphtheria antitoxin, asphalt pavements, recreation piers, small parks, improved tenement conditions. What relative value each one of these has, can, of course, not be estimated, but it is a grand array of disease fighting elements, and an object lesson *par excellence.*

An analysis of the figures given shows that the total infant mortality has decreased from 242 to 158, or about two-thirds, while the deaths during June, July, August and September, have decreased to somewhat more than one-half. The deaths from infantile diarrhea in summer, shows a reduction by one-half of the rate of 1901 or 1902.

If statistics of this favorable character are obtainable in large cities, the improved conditions obtaining in smaller, well administered communities will doubtless demonstrate similarly good results. The agencies now at work in Milwaukee will still further reduce our rela-

tively low infant mortality through the season is too far advanced to demonstrate the results of the recently introduced milk depot distibution as now employed here. This and the watchful supervision of schoolhouses, bakeries, dairies and water supply ought to place Milwaukee, already ranking high, highest on the score of healthfulness among the large cities.

NURSING MADE EASY.

We are in a progressive business age, when a new breakfast food or a new correspondence school is oftentimes developed in a night. One who is familiar with the advertisements in the lay publications can hardly be surprised to see an attractively illustrated notice stating that nursing can now be learned by correspondence! It may be something of a shock to the old-time practitioner, who has been used to the accurate, unobtrusive, trained nurse of the present time, to think of having to work with an artificially trained nurse, one made by a few weeks' cramming of correspondence.

We are not, as yet, familiar enough with the idea to understand how these graduates will learn to make beds, how they will become accustomed to seeing instruments and blood without fainting, and how they will learn to make those observations which are so helpful to the physician. Their gowns and caps and red crosses can easily be fashioned along with the engraving of their diplomas.

Foreign languages are now successfully taught by means of the phonograph, at least we are told so by the advertisements, and a correspondence school nurse might do wonderfully well with a moving picture device. First, she could study pictures of the movements and actions of those about the operating room, and after she had thoroughly familiarized herself with these she could reverse the machine and send to her teachers a series of pictures demonstrating how she would act and what she would do in certain emergencies. A phonographic attachment might be added to such a machine to accustom her to the scolding of some of the more crabbed old operators.

We trust that the demand for this type of trained nurse will not exceed the supply for some years to come, and that in the meantime there will be enough old-time nurses to keep our hospitals running along the present lines.

SPECIAL CORRESPONDENCE.

OBSTETRICS AND GYNECOLOGY IN VIENNA.

On the whole, the practice of surgery in Vienna is much like that in America. In the lines of gynecology and obstetrics, however, there are very material differences. Things greatly dreaded in the States are done here frequently without fear of the results. On the other hand, measures which are undertaken almost daily in the practice of a busy American gynecologist are here rarely used. The practically universal occurrence of rickets is the chief cause for operative interference in obstetrical cases. A pelvis with normal measurements is indeed a rare sight in Vienna. Cæsarean section is practiced quite frequently—about ten times a year at each one of the clinics. Halban says that in the last six years not a single death has occurred as a result of the operation at the Schauta clinic. Therefore this has come to be looked upon as a relatively harmless procedure. Halban accounts for this good record by the fact that the contraindications to the operation are religiously observed. Cæsarean section is never undertaken if the patient has been examined vaginally before admission to the hospital—in which case she is treated as infected—or if her temperature is over 100° F. Probably at least one other factor contributes to the splendid results of this operation—the experience of the operators. At the Allg. Krankenhaus almost 10,000 women are confined annually in the three clinics. In the Schauta clinic I have seen the eighteen beds for women in labor all filled and three women sitting in chairs waiting for a chance to go to bed. This vast material helps to make the assistants expert gynecologists and obstetricians after a few years of service. If the child cannot be delivered *per vias naturales* and Cæsarean section is contraindicated, craniotomy is given the preference of any operation, whether the child be alive or not. Symphysiotomy is not employed at all; it is claimed that the relatively slight increase in the pelvic diameters obtained by it, does not compensate for the dangers of laceration of the soft parts—that this is especially true if the forceps must be applied in addition. Judging from their results with Cæsarean section, they believe it to be the safer procedure, when the choice lies between the two.

In the matter of gynecology, the treatment differs radically in many respects from that practiced in America. In spite of the conservatism advised by modern teachers, surgical treatment is even much less frequent in Vienna. Gonorrheal cases in the acute stages are never operated; when the infection becomes chronic, many measures

are employed before resorting to the knife. Thus, the appendages are rarely removed on account of gonorrheal pyosalpinx, and what may be effected by conservative means is really surprising. Tub-baths, sitz-baths, hot vaginal douches, tamponades, or, when the pain is not so very severe, pelvic massage by bags of mercury, are all employed. It is not at all unusual to note that in the course of a month a large painful swelling of the adnexa, in which the different parts cannot be distinguished, has almost completely disappeared, and that the tube and ovary can be felt as masses not much greater than their normal size. Large pelvic exudates are caused to be absorbed by similar methods, and there is no resort to operative measures unless fluctuation is very distinct. It is considered hasty and dangerous to introduce a needle for exploratory purposes, until an abscess can be diagnosed with relative certainty.

When the appendages on both sides have become involved by gonorrhea, and conservative treatment proves of no avail, usually a complete extirpation of the uterus with its adnexa is carried out. In most gynecological operations, where such a thing is possible, the vaginal route is chosen. A myoma as large as a child's head, or an ovarian cyst of much greater size may be removed in this way without trouble. The chief difficulty lies in the existence of pelvic adhesions. Carcinomata of the uterus, however, no matter how small, are always removed by laparotomy, and Wertheim recommends removal of the iliac glands at the same time. The existence of demonstrable metastases in the pelvis is considered sufficient contraindication to any operation. If such are not palpable, Wertheim recommends laparotomy, no matter of how long standing the uterine tumor may be or what size it may have attained. The size of the primary tumor, he claims, is no indication whatever of the nature of the secondary growths, and hence, when in doubt, an exploratory laparotomy is always advisable. A case in which the whole uterus was carcinomatous, but in which no glandular or peritoneal involvement could be demonstrated, was operated upon, and now—four years afterwards—there is no recurrence.

Wertheim's first step in the abdominal extirpation of the uterus, whether surrounded by adhesions or not, is the exposure of both ureters throughout their pelvic course. The procedure is a very simple one: he incises the peritoneum over the ureters at the pelvic brim and follows them down to their entrance into the bladder. Since they remain exposed throughout the operation, there is no danger of their being cut or tied off. This appears to be much easier and more rapid than the preliminary catheterization of the ureters, which some have recommended in recent years.

In the case of ovarian cysts, Schauta advises the removal of the cysts in toto if a laparotomy is performed. The cyst may not be punctured or incised, no matter how large may be the opening required. He bases this recommendation on five cases, in which cystic metastases grew in laparotomy wounds in his experience. When, however, the cyst is removed by the vaginal route, he does not hesitate to puncture it. These apparently contradictory measures remain unexplained, but Schauta states that in his experience a cystic growth has never occurred in the vaginal wound. Wertheim believes that the danger of inoculation of a cystic growth into the laparotomy wound—indeed a rare occurrence—is out of proportion to that incurred by an enormous abdominal opening.

While each man of large experience in Vienna, as elsewhere, formulates his own indications and his own methods of surgical treatment, one striking fact appears common to all: that resort to the knife is much more carefully considered and much less frequent than among their American confréres. (L. M. L.)

Clinical Diagnosis of Intestinal Parasites.—STILES (*Jour. A. M. A.*, July 18, 1903) refers to the difficulties in the way of diagnosis from the symptoms alone except in extreme cases. Blood counts are of great value and it is important to bear in mind the fact that an increased eosinophilia is an indication of possible infection with animal parasites. When this is present an examination of the feces for eggs or embryos of parasites should be made at once and if these are not found the possibility of trichinosis should be considered. Gross examination of the stools may reveal segments of tape-worm, or the entire adult worm in nematode infections, especially if the patient has taken a dose of calomel or of some anthelmintic, or has abstained from food for 24 to 48 hours. In the first stage of trichinosis the adult trichinae may be found; in hunting for them the stool should be diluted with warm water and examined in a flat glass dish over a black background.

A routine microscopic examination of feces is urged as a duty in all hospital cases and as far as practicable in private cases as well. The technic is simple as staining is unnecessary. A minute portion of feces is taken on the end of a match or a glass rod and thoroughly mixed on a large glass slide with enough water so that the resulting mixture is not too thick. Next drop on a cover glass, several may be used on the same slide, and the specimen is ready for examination. At least two cover glass preparations should be examined before a negative opinion is given. In this work the specimen and the preparation must be carefully protected from flies and the hands must be immediately disinfected if soiled by the feces to prevent accidental infection.

(A. W. M.)

CLINICAL REPORTS.

VESICO - URETERO - PYELO - NEPHRITIS. *

By Frederick Shimonek, M.D., Milwaukee.

C. W. Age 35; married; fireman by occupation.

Previous Condition.—General health good; no history of venereal disease. When ten years of age some inflammatory process developed in his penis, which finally led to the formation of an urinary fistula through the corpus spongiosum urethrae, about half an inch from the normal meatus; the normal meatus urinarius became obliterated.

The fistula was of such a diminutive size that during those twenty-five years he labored under a great disadvantage in voiding his urine. It required a considerable effort on the part of the accessory muscles to empty the bladder, so that residual urine was always present in large quantity. Micturition was very frequent, day and night, gradually increasing in frequency and difficulty; the quantity of urine also increased to over one hundred ounces.

Status Praesens.—Great constitutional disturbance; temperature, 104°; pulse, 90, regular and strong; anorexia: insomnia, tongue heavily coated; bowels constipated; frequent and very painful micturition. Complains of excessive pain in the right lumbar region; favors the right side when in the erect position by bending his body to that side so as to relieve the pressure upon the kidney; pain is of a steady, throbbing character; very large amount of pus and some blood in the urine. Sp. Gr. 1020; pus casts, no sugar. The presence of albumin is due to the pus and has no other significance. Examination revealed the right kidney palpable and extremely tender to touch, so that it was impossible to feel the outline very distinctly; but it appeared to be greatly enlarged.

Diagnosis.—The urethral obstruction was regarded as a predisposing cause, leading gradually to infection of the bladder, ureter, pelvis of the kidney and finally the kidney itself.

Treatment.—First: Enlarging the unnatural meatus by slitting it open to adequate proportion.

Second: Nephrostomy, *i. e.*, the establishment of thorough drainage of the kidney through the loin, in contra-distinction to nephrotomy —meaning the incision followed by immediate closure of the kidney. The loin incision was commenced at the point of meeting of the quadratus lumborum and the twelfth rib, and carried obliquely downward and forward about six inches toward the crest of the ilium; it was gradually deepened until the false capsule was reached, which was then torn through with the fingers. The kidney was carefully isolated, little by little, gently and gradually lifted from its bed into the lumbar wound and through the wound delivered to the lumbar surface. An incision was carried along its convexity from one pole to the other and down into its pelvis, which was then explored with the finger. The ureter was explored with a No. 4 English soft bougie, passed

*Reported at the Milwaukee Medical Society, May 12, 1903.

through the incision and pelvis and found to be perfectly patent, thereby demonstrating that the future of the kidney was good and that a permanent lumbar urinary fistula would not exist.

Third: Silk-worm-gut sutures were passed through each edge of the kidney incision, the kidney gently replaced, and sutures passed through the edge of the muscles of the lumbar cut and lightly tied. It was feared that they might not hold on account of the excessive softness of the kidney tissue, but since it was very easily approximated to the abdominal wall, they were perfectly efficient. A large amount of very dark blood flowed from the kidney wound, which, however, was very easily controlled by gauze packing. The external wound was partly closed by silk-worm-gut sutures at each pole, so that the center corresponded directly with the incision in the kidney, thus facilitating the repacking.

Pathology.—The kidney was very large, soft, almost black, some adhesions were shown in shreds on the surface of its true capsule. No pus could be seen, but a hard nodule, which seemed to the touch as if it might be a stone, was found in the upper pole; this was simply an exudate, where in all probability an abscess would have developed in the near future. On closer inspection here and there small white lines could be seen in the parenchyma of the kidney; they were taken to be pus in the tubuli uriniferi.

Urine discharged freely through the lumbar incision; temperature and pulse slowly became normal, tongue clean and appetite good; pain in the right loin diminished until it completely vanished in the course of some weeks after convalescence; nutrition became painless and easy. The large quantity of urine voided before the operation persisted for several weeks. The large quantity of water the patient drank and the urinary irritation very probably explain the enormous excretion the high sp. gr. shows it not to have been merely a transudation, but due to an increase of the excretory function of both kidneys. This certainly was a most happy circumstance, for had it been the reverse, as is frequently found in such intense infection of the urinary organs, the addition of uremia to the infection must have been fatal.

Urotropin in 45 gr. doses daily to asepticize the urine, also considerable quantities of sodic phosphate to increase its acidity and to drain through the intestinal tube, were given, I think, with benefit.

The bladder was irrigated daily with a weak solution of salicylic acid, followed by permanganate of potassium.

The loin fistula closed in six weeks, and the patient returned to work several weeks later, fully restored to health.

REPORT OF TWO LAPAROTOMIES FOR THE REMOVAL OF UTERINE TUMORS.*

By Arthur J. Puls, M.D., Milwaukee.

CASE I.

Mrs. Y, aged 35, mother of two children, nine and seven years, respectively, became aware of a gradual enlargement of her abdomen.

*Presented at the Milwaukee Medical Society, May 12, 1903.

She is of short build, very stout, anemic, and weighs 180 pounds. Suspecting that the enlargement was not due to a natural increase of fat tissue, she submitted to an examination by her house physician, who diagnosticated an ovarian cyst in the abdominal cavity. A few days later the patient came to me for an examination, and I found a large, solid tumor, having the size of a fifth month pregnancy, extending high up in the abdominal cavity above the umbilical region, and freely movable. On placing the patient in the dorsal position the tumor presented itself plainly by its upper sharp contour; on palpation, on account of the resistance given by the tumor, I excluded pregnancy and felt assured that the mass was a monodular uterine fibroid. On bimanual examination it was evident that the tumor was within the uterine walls, since the entire growth moved freely with the cervix uteri. Both uterine appendages could not be outlined, hence an ovarian cyst was out of the question. The patient later consulted two other colleagues, who confirmed my diagnosis, and both advised an immediate operation.

In her history the patient repeatedly stated that she never felt better in her life, but concealed from me and her house physician the fact that several months previous to the first examination she had been troubled with swelling of the feet and ankles. At the time of my examination the heart was normal and the urine free from albumen. The presence of the tumor gave her no pain at any time, nor did it cause profuse menstrual flow or irregularity of the monthly periods; she was not troubled with leucorrhea. On looking over the specimen you will notice that the uterine cavity is twice its normal size and the uterine body likewise elongated. The tumor itself is situated in the posterior uterine wall and does not protrude into the cavity nor does the uterine mucous membrane show signs of atrophy at any one place. This condition offers sufficient explanation for the absence of both menorrhagia and uterine colic—oftentimes present in interstitial myomata.

Operation April 16, 1903. On opening the peritoneal cavity I was surprised at the thickness of the peritoneum, and still more so at the cystic degeneration of both ovaries, since these changes had taken place without causing distress or discomfort to the patient.

The operation itself was a difficult one owing to the shortness of the broad ligaments, and more so on account of the thick abdominal walls. However, the tumor was removed without much loss of blood and with no apparent shock to the patient. Convalescence was interrupted on the tenth day by an attack of pleurisy on the right side, which had subsided considerably on the sixteenth day. The temperature did not at any time exceed 102° and the pulse 110°. She never had a chill, and aside from pain in the chest the patient felt no discomfort. She was allowed to sit up on the twelfth day, and from then on daily, an hour at a time, and previous to this was propped up to prevent hypostasis of the lungs.

The dressing was removed on the sixth day and the wound found closed per priman with the exception of 5 c.m. at the upper end, in the

neighborhood of the umbilicus; this part was added to the wound in order to allow the extraction of the tumor.

While sitting in the chair Sunday morning at nine o'clock, May third, the sixteenth day after the operation, the patient, apparently in the best of spirits, desired to get up and lie down on the bed. During the attempt to get out of the chair alone she fell back suddenly and without uttering a cry stopped breathing. Efforts of resuscitation were of no avail.

An autopsy of the body was refused by the family, and I therefore signed "embolism" as the probable cause of the exitus, on the death certificate.

Osler in dealing with the subject of acute pleurisy (Principles and Practice of Medicine, 4th edition, page 671) says, "When one pleura is full and the heart is greatly dislocated, the condition, although in a majority of cases producing remarkably little disturbance, is not without risk. *Sudden death* may occur, and its possibility under these circumstances should always be considered. I have seen two instances—one in right and the other in left-sided effusion—both due, apparently, to syncope following slight exertion, such as getting out of bed. In neither case, however, was the amount of fluid excessive. Weil, who has studied carefully this accident, concludes as follows: (1) That it may be due to thrombosis or embolism of the heart or pulmonary artery, edema of the opposite lung, or degeneration of the heart muscle; (2) such alleged causes as mechanical impediment to the circulation, owing to dislocation of the heart or twisting of the great vessels, require further investigation. Death may occur without any premonitory symptoms."

CASE II.

Mrs. H., aged 33, married 14 years, sterile, was operated on May 16, 1896, and an ovarian cyst having the size of a fetal head was removed, together with the adjacent right tube. The left uterine appendage was found adherent to the pelvic floor, and was freed and brought into view in order to correct the anatomic changes, and if possible to re-establish its functions.

The fimbriated ends of the tube were separated by blunt dissection, and the patency of the lumen of the tube established by introducing a probe down into the uterine cavity. The fimbria were spread over and sutured to the surface of the ovary and then both tube and ovary were replaced into the pelvic cavity.

The uterus was found normal in size and position, likewise the vermiform appendix.

The patient made an uneventful recovery and left the hospital in apparently good health, although she claims never to have been free from pains during the menstrual period which returned at regular intervals up to the present time.

Bimanual examination May 4, 1903, reveals the following conditions: The uterus is increased in size to that of an orange, nodulated and irregular in shape, freely movable and inclined to adopt the retroverted position. Within Douglas's pouch is found a mass firmly fixed

to the posterior uterine surface which corresponds in its outline to that of the left appendage.

Celiotomy performed May 12, 1903, disclosed a number of intestinal adhesions which were dissected from their attachments; the first from the bladder, the second from the anterior abdominal wall and another from the pelvic floor in the neighborhood of the appendix; the irregular and enlarged mass, which I had erroneously taken for a large uterine body at the previous examination, was found to consist of a pedunculated myoma arising from the posterior surface of the atrophied uterus. The left appendage was found fixed to the pelvic floor within the cul-de-sac and was easily separated from its adhesions.

Hysteromyomectomy and removal of the remaining appendage seemed to me to be indicated and was performed after Kelly's method.

An examination of the specimen shows another myoma, having the size of a bean, within the uterine walls anterior to the internal os. The uterine canal measures only 4 c.m. and the entire uterus 5 c.m. The tube is not enlarged and is still in the same condition as when it was sutured at the first operation. The ovary has undergone cystic degeneration and shows very little healthy tissue. A peculiar looking fibrous growth about 3 mm. in length presented itself on the anterior wall of the sigmoid flexure, and was also enucleated.

Dr. Theodore Hartwig, of Cedarburg, died Sept. 21st, 1903, aged 83 years. Dr. Hartwig had practiced at Cedarburg over fift years. He was the father of Dr. Max Hartwig, of Port Washington.

Dr. F. E. Darling has received the appointment of Registrar of Vital Statistics at Milwaukee, succeeding Dr. W. H. Bennett, who resigned recently to resume private practice at Oregon, Wis.

Dr. Henry B. Hitz, of Milwaukee, has been elected Professor of Rhinology and Laryngology at the Wisconsin College of Physicians and Surgeons.

The Wisconsin College of Physicians and Surgeons has purchased a lot adjoining the present property of the institution at the southeast corner of Fourth and Reservoir avenue. It is the intention to erect a building for the dental department of the college.

THE STATE MEDICAL SOCIETY OF WISCONSIN.

ORGANIZED 1841.

Officers for 1903-1904.

F. E. WALBRIDGE, Milwaukee, President.
JAMES MILLS, Janesville, 1st Vice-Pres. C. C. GRATIOT, Shullsburg, 2nd Vice-Pres.
CHAS. S. SHELDON, Madison, Secretary. S. S. HALL, Ripon, Treasurer.

Provisional Councilors.

1st Dist., J. G. Meacham, - - - - - Racine.
2nd Dist., J. S. Walbridge, - - - - - Berlin.
3rd Dist., C. S. Smith, - - - - - - Elroy.
4th and 5th Dist., G. A. Kletzsch, - Milwaukee.
6th Dist., H. Reineking, - - - Sheboygan.
7th Dist., W. T. Sarles, - - - - - Sparta.
8th Dist., J. F. Pritchard. - - Manitowoc.
9th Dist., T. J. Redelings, - - Marinette.
10th Dist., J. M. Dodd, - - - - Ashland.
11th Dist., E. L. Boothby, - - - Hammond.

Next Annual Session, Milwaukee, June, 1904.

The Wisconsin Medical Journal, Official Organ.

SOCIETY PROCEEDINGS.

SUGGESTIONS AND ANNOUNCEMENTS FOR THE 1904 MEETING.

To the Members of the State Medical Society of Wisconsin:

In preparing the program for the next meeting, the Committee has passed a resolution cordially inviting all members, desiring to do so, to present papers. The titles and synopses must be in the hands of the chairman by February 1st, 1904.

The next meeting being the first following the reorganization, it is the earnest desire of the Committee to present to the Society a program that will not only be of a high order from a scientific standpoint, but one that will be open to free and liberal discussion.

The time for the reading and discussion of papers being necessarily brief, the Committee reserves the right to exercise its discretion in the matter of selection should the number of papers presented exceed the limit of twenty.

Under the new by-laws a limitation of twenty minutes is allowed for the reading of each paper, and in the discussion "no member shall speak longer than five minutes, nor more than once on any subject except by unanimous consent."

All papers should be typewritten, and each member furnishing a paper should suggest the names of several members to take part in the discussion.

HENRY B. HITZ,
Chairman Program Committee.

ORGANIZATION NOTES.

It is now more than three months since the meeting of the State Society, and it may be well to note the progress made thus far in our efforts to organize the medical profession of the State. The record will be continued from month to month in the Journal.

There are 72 counties in the State, and, making allowance for the union of some of the smaller counties, there should be at least 60 County Medical Societies.

The following counties have sent to the Secretary—with their application for a charter—full reports. This means a complete and correct list of all the physicians in the county—members and non-members—on the blank furnished for that purpose, with $2.00 for each member who has not already paid this year's dues to the State Society.

Ashland (Barron, Polk, Gates), Douglas, Dunn, Green Lake, La Fayette, Pierce, St. Croix, Winnebago, Fond du Lac, Juneau, Chippewa, Waupaca, Price, Racine.

The following have sent lists of the physicians in the county, but have not yet remitted the State Society dues: Brown, Waukesha, Grant, Manitowoc, Clark and Washington.

The following have sent simply a list of the members of the Society and no dues: Ozaukee and Marinette.

In addition to these the Secretary has been informed that the following counties have organized, but has received neither reports nor dues: Dodge, La Crosse, Vernon, Sheboygan, Columbia, Jefferson, Wood, Milwaukee, Outagamie, Walworth, Oconto, Sauk, Dane (Washburn, Sawyer, Burnett). This makes 38 County Societies in all—about two-thirds of the State, and is a good beginning.

In the 22 Societies which have reported their membership, there are 407 members in all. Of these 126 are former members of the State Society, and 281 are not. This makes a ratio of two and one-third new members to one old member. If this increase is maintained throughout the State, our 700 members will increase to about 2,300 members. This is hardly probable, but yet, we should have at least 1,800 members before the next meeting of the State Society.

Doubtless many more counties would have reported before this had there not existed some confusion as regard the matter of yearly dues to the State Society. Several counties have notified the Secretary that they should not report till Jan. 1, 1894, intending that the payment made at that time should cover the dues to the State Society till Jan. 1, 1905. This whole matter will be acted upon by the Council, which meets at Milwaukee Oct. 13.

An important feature of the general plan of organization is the collection of the Medical Statistics of the State. This involves obtaining, in the first place, by each County Secretary, a complete and accurate list of all the physicians in the County. The personal record blank is then sent to each. The "application for membership" blank is filled out by those applying for membership in the County Society, and the "Memorandum for Permanent Record" by those who do not. It is not necessary to fill out both blanks, as some are doing. The plan may seem more complicated than necessary, but most of the information is quite essential in forming an opinion as to the educational and professional status of the physician.

We want to know not only who comprise the profession of the State, but something about their standing and qualifications as well. Moreover, the fact that these very blanks are all being used, or will be used, in every county in every State in the Union, gives dignity and reality to the methods.

These personal record blanks are copied on cards to make a "card index," which every County Secretary keeps for his own county, and the State Secretary keeps for the whole State. These records will be corrected annually in April of each year, when the State dues are paid. Each County Secretary will send to the State Secretary the corrected statistics of the county. These records will ultimately form the basis of a National Medical Directory published by the American Medical Association, and will be most valuable. Accordingly, when these blanks are sent you, do not throw them into the waste basket, for it will simply put your own profession to the trouble and expense of sending you another blank. In fact, if we are to succeed in this great plan of national organization, it will require the cordial co-operation of every member of the profession in all features of the plan. Some County Secretaries report apathy or opposition in some quarters, but we ought to remember that our adoption of this plan, sooner or later, was inevitable. When we consider that it has been or will be adopted by every State, plainly Wisconsin could not afford to be left out of the deal. But we have every reason to rejoice that the step has been taken. The beneficial effects of the moment can already be seen in the general awakening regarding the interests of the profession as a whole. New men are developing a rare ability in organization all over the State. The "Medical Society Spirit" is fast gaining ground. The ranks are forming. Coherence, loyalty, and discipline are taking the place of selfish indifference and the "every man for himself" spirit. And out of it all will come a united profession, with better ethics and higher ideals. (C. S. S.)

GRANT COUNTY MEDICAL SOCIETY.

At the meeting of the Grant County Medical Society held at Lancaster, September 10th, the following members were admitted: C. A. Armstrong, Leroy; G. Armstrong, Boscobel; J. C. Blair, Hazel Green; D. M. Cook, Glen Haven; S. E. Hassell, Lancaster; C. S. Hayman, Boscobel; U. L. Holford, Cassville; E. A. Ketterer, Montfort; E. MacDonald, Cuba City; J. E. McGovern, Potosi; J. H. Pflueger, Platteville; L. H. Treglown, Arthur; Wm. H. VanDusen, Montfort.

Application for charter was postponed until the December meeting, which will be held at Fennimore.

The only paper presented was "Surgical Treatment of Hemorrhoids," written by Wilson Cunningham, and read by James Oettiker. An informal discussion of Gastro-Enteritis was participated in by all present.

Owing to the condition of the roads, only a small number were present. P. L. SCANLAN, M. D., Secretary.

PORTAGE COUNTY MEDICAL SOCIETY.

At a meeting held at Stevens Point on Sept. 1, the Portage County Medical Society was organized, and the following officers were elected: President, Dr. Galen Rood, Stevens Point; vice-president, Dr. A. H. Guernsey, Amherst; secretary and treasurer, Dr. Carl von Neupert, Jr., Stevens Point; censors, Drs. W. F. Atwell, D. S. Rice, and Carrie A. Frost, all of Stevens Point.

The plan of organization suggested by the American Medical Association was adopted.

SAUK COUNTY MEDICAL SOCIETY.

At a meeting held at Baraboo on Sept. 24, the Sauk County Medical Society was organized and the following officers elected: President, Dr. Charles Gorst, Baraboo; vice-president, Dr. R| Trumbauer, Logansville; secretary and treasurer, Dr. G. L. Cramer, Baraboo; censors, Drs. Hulburt of Reedsburg, Martin of Merrimac, and Buehler of Prairie du Sac.

The first regular meeting will be held at Baraboo on Nov. 11. Thereafter the meetings are to be held on the second Wednesdays of February, May, August and November.

G. L. CRAMER, M. D., Secretary.

IOWA COUNTY MEDICAL SOCIETY.

At a meeting held at the Hotel Royal, Mineral Point, on Sept. 22, the Iowa County Medical Society was organized with the following officers: Dr. W. J. Pearce, president; Dr. F. M. Bailey, vice-president; Dr. S. P. Deahofe, secretary and treasurer; Dr. T. S. Lawler, delegate; Drs. H. F. McDonald, S. P. Deahofe, W. J. Pearce, censors; Drs. L. H. Hughes, F. M. Bailey, C. W. Grimes, Committee on Public Health.

The next meeting will be held Dec. 1 at Dodgeville.

S. P. DEAHOFE, M. D., Secretary.

PHILADELPHIA OBSTETRICAL SOCIETY.

Meeting of May 7, 1903.

The President, Dr. J. M. Fisher in the Chair.

PLACENTA PREVIA WITH TRANSVERSE POSITION—MANUAL DILATATION—PODALIC VERSION.

By Dr. Wilmer Krusen.

The following case of placenta previa seems of sufficient interest to be reported, if only to stimulate discussion upon the treatment of this most serious complication of pregnancy.

Mrs. Mc., aged 34; ixpara, was first seen with her physician, Dr. John McCormick, on January 6, 1903. The diagnosis of placenta previa had already been made. The patient had been bleeding irregularly for five weeks; her general condition was good, and the pregnancy was about at term. The hemorrhages had been quite profuse. On examination, the fetus was found in a transverse position, head to the left of the mother's abdomen and the back anterior. The cervix was softer and more succulent than usual. The os was slightly dilated, so that little difficulty was experienced in passing the finger through the cervical canal and feeling the characteristic sponge-like placental tissue above. As the patient had refused to enter any

maternity hospital it was determined to treat the case at home as well as the environment would permit.

On January 7th, under ether anesthesia, after the usual careful antiseptic preparation, rapid manual dilatation and podalic version were performed with speedy delivery of the child. The dilatation of the os was easily accomplished as the woman had borne nine children and had a roomy birth canal. The hemorrhage during the detachment of the placenta, which was centrally implanted, was exceedingly profuse. A gush of blood, resembling the outpouring from a fire-plug, deluged the obstetrician. The right anterior leg was brought down first, followed in a few seconds by the other, and the buttocks temporarily controlled the hemorrhage. The child was speedily delivered, although in extracting the arms the right humerus was broken. As the uterus was much relaxed the placenta was immediately delivered manually.

The anesthetic was withdrawn and by vigorous internal and external manipulation, by irrigation with hot normal saline solution and a tampon of iodoform gauze, uterine contractions were excited. The patient's condition was excellent; no shock was noted; the pulse was full and strong, running from 75 to 80. The child was perfectly developed, and although slightly asphyxiated, was easily resuscitated.

As the mortality for the children in placenta previa is over 50 per cent and increases as the placenta is more centrally situated, the saving of the child was particularly gratifying and could not have been secured, had there been the slightest obstruction or delay in delivery as the placenta was perforated and almost completely detached some seconds before the birth of the child. The subsequent convalescence of both patients was uneventful.

This case illustrates the value of terminating pregnancy in a most conservative manner as soon as possible after a placenta previa has been positively diagnosticated without waiting for the onset of labor, or subjecting the patient to the danger of hemorrhage in the absence of a physician. By having trained assistants and all facilities at hand for the treatment of hemorrhage and shock, the best interests of the patient are assured. In this case the multiparity of the patient and the roomy birth canal rendered the manual dilatation extremely easy. In other patients, under other circumstances, it may be necessary to employ some mechanical method to effect dilatation, such as the Champetier de Ribes balloon or the Bossi dilator; but I believe it will rarely be advisable to perform Caesarean section in the treatment of these cases.

Discussion.

DR. STRICKER COLES—I was very glad to hear of the success of Dr. Krusen with his case of central placenta previa, having saved both the mother and the child. This subject has greatly interested me for some time,

but I have not been able to get satisfactory statistics, as most papers do not clearly define the different varieties of placenta previa. The mortality of the lateral, marginal and partial varieties should not be considered with that of the central variety. The first three can be treated by rupturing the membranes and saving in many cases both the mother and the child, so that I will limit my discussion entirely to that of central placenta previa.

In a great many cases of central placenta previa, the bleeding comes on early at about the fifth month, before the child is viable, and in these cases the life of the child is, of course, not to be considered. The case is best treated by version and slow extraction. In cases where the child is viable we come across two conditions: The first is where there has been considerable hemorrhage and the life of the child is lost, or so nearly lost that a radical operation would not be justifiable. These cases would be best treated with version and the slow extraction of the child. But in those cases where the child is viable and nearly at term, and there has not been a severe hemorrhage and the child is in good condition, we have to consider both the life of the child and that of the mother. If the patient is a multiparous one, where the cervix can be easily dilated and the vagina is large, these cases would be probably successfully treated with version and rapid delivery, trying to save both the mother and the child; but, we must always remember that where we do rapid version and try to save the life of the child, at the same time the danger to the mother is increased, due to the lacerations of the cervix which is soft and vascular and will increase the danger of post-partum hemorrhage, because the muscle fibres of the cervix have been torn and paralyzed. Central placenta previa does not very often go to full term, but if I should see a patient with the central variety where the cervix is not easily dilated and the vagina is small, whether it be a primiparous patient, or one that has had only two or three children, I should certainly advise such a patient to have Cæsarean section, and for two reasons: First, for the sake of the child, as you will hardly be able to deliver the child quickly enough to save its life in more than 25 per cent.; and, second, for the mother, to lessen the danger of post-partum bleeding. I would in this case do celiohysterotomy, unless there were some special reasons for the removal of the uterus. Where the child is removed through the uterus there is not so much danger of hemorrhage as the cervix has not been torn and I do not think it is necessary in these cases to remove the uterus. If necessary to control hemorrhage, you can pack the uterus with iodoform gauze.

In conclusion, version should be performed in those cases where the child is not viable and where the child is dead or its life is endangered from severe hemorrhage, and where the cervix is easily dilated and the vagina is large. In those cases where the cervix is not easily dilated, the vagina is not large, the woman has not had a severe hemorrhage and the child at or near full term of gestation, under these circumstances I think Cæsarian section should be employed.

DR. GEORGE M. BOYD—Dr. Krusen is to be congratulated upon the result in this case. To deliver a patient with central placenta previa successfully and with a living child, I think, is a great feather in his cap. It shows his dexterity and ability in performing version.

I agree with Dr. Coles in regard to the treatment of a few cases of placenta previa that will come under our care; that is, treatment of placenta previa centralis by Cæsarean section.

About a year ago I expressed my opinion on this subject in a short paper before the County Medical Society; and I remember in the discussion of that paper the consensus of opinion was opposed to Cæsarian section for even placenta previa centralis. Each case I feel must be a study in itself. In marginal placenta previa, manual dilatation and podalic version, it seems to me, will serve us best. In my experience it has seemed wiser after performing podalic version, to treat that case as a breech presentation rather than rapidly extract the child. For the majority of cases of placenta previa manual dilatation and podalic version will serve us best. There are a few cases that probably would be better treated by Cæsarean section; and those cases I would limit to central implantation of the cervix in the primiparous patient and in a patient where there exists a rigid cervix—a cervix that can only be dilated with difficulty.

There have been a number of papers written upon the subject pro and con, and the majority I think have opposed section for the treatment of placenta previa. One criticism has been the fact that in the majority of cases there has existed some hemorrhage before you see the case. Another criticism is that some cases are already infected; another is the fact that in many of the cases the pregnancy is not at term, and the child will hardly live, even if delivered by Cæsarean section.

The course that I believe we should follow in all cases of antepartum hemorrhage should be with the first hemorrhage to anesthetize our patient and make a careful diagnosis. If the patient is suffering from a marginal or lateral implantation, manual dilatation and version will suffice. If, however, the placenta is centrally implanted and the patient primiparous, the cervix rigid, and difficult to dilate, the patient at term or near term—I would feel it my duty after she has come out of the ether, to place the situation plainly before her and give her the chance of Cæsarean section, should she prefer that operation.

DR. OLIVER HOPKINSON—The Doctor must be congratulated upon the happy ending of his case. I believe in placenta previa the lives of the mother and child are antagonistic; trying to save both, you are apt to lose both.

I would like to ask the Doctor how he made the diagnosis of central placenta previa, which I think can only be made after full dilatation of the os. The treatment in cases of the variety described to-night is version followed by slow extraction. I believe it safer to bring down one foot only, giving the uterus time to contract and retract. The great temptation in these cases is to hurry extraction, producing a post-partum hemorrhage, which may seriously jeopardize the life of the mother. In reference to Cæsarean section, I think its field of usefulness is very limited. With a rigid os and mother and foetus in good condition it could be considered, especially if you fear a centrally located placenta.

DR. L. J. HAMMOND—My experience in the treatment of post-partum hemorrhage has in the past been rather larger than I expect it will ever be again, since my work nowadays is not so largely obstetrical. The difficulty I have always experienced has been in the early diagnosis of placenta previa, in this respect fully agreeing with what has been said by Dr. Hopkinson. At least, with me it is extremely difficult, and in a large percentage of the cases it has been impossible for me to say that any given case was one of

placenta previa, either centrally or laterally, until after the cervix was dilated sufficiently for me to determine it by digital examination. When I find I have to deal with a condition of placenta previa, I at once anesthetize the case and undertake a rapid dilatation. I never have found any difficulty in getting rapid dilatation, because in every case, to the best of my memory, that I have ever seen, it has been at full term, the woman having been in labor has consequently lost considerable blood and through having lost this blood the tissues are readily relaxed permitting dilatation, not alone of the cervix, but also of the entire birth-tract to be decidedly easy of accomplishment. Before active uterine contractions begin the bleeding can always be controlled by thoroughly tamponing the vagina with sterilized gauze. This in addition to controlling hemorrhage, stimulates active uterine contractions. So I have never had any difficulty in this direction, i. e., in the dilatation. If uterine contractions are not strong, after securing the feet, I bring one foot down as a tampon. After this I simply content myself to wait until the cervix is sufficiently dilated to extract the child. I have never, to the best of my memory, had a fatal termination from placenta previa. I have seen one or possibly two fatal cases where students had been in attendance, the condition not having been sufficiently early recognized. In my own practice, however, I do not remember ever having lost a case. The method described has been my mode of procedure. Personally, I do not see how it is possible to make a diagnosis weeks or months before the labor begins, unless the cervix be dilated to such an extent as to precipitate labor prematurely.

DR. KRUSEN closes—One or two words about the case in point. This patient was a very favorable case. She was one of those Irish women in the habit of having their children easily. The babies had been almost ready to drop out of the birth-canal. The delivery, then, was performed in three or four minutes. The legs could be grasped with the greatest ease. There was no particular skill required in effecting version.

As to why I am certain this case was one of central implantation—it being suggested by Dr. Hopkinson as possibly an error in diagnosis—the method of making the diagnosis was something like this: In dilating the cervix, the more I dilated the more I found that the orifice was covered with the placenta. I started in with gradual dilatation, getting one finger in early and later the entire hand, and found as I dilated the os, the os was still covered with placental tissue, so I felt confident of my diagnosis. At last, I despaired of getting around the edge of the placenta, and so perforated it and quickly accomplished the version.

In regard to teaching the Cæsarean section as a method for treating placenta previa, I think we should be very careful as an obstetrical society. In the hands of accomplished obstetricians and operators this is practically a successful method of treatment; but, if we put ourselves on record as advocating the treatment of placenta previa by Cæsarean section, we are going to sacrifice not only the lives of the children, but very often the lives of the mothers. When we can have statistics presented, showing 107 cases in one series by four practitioners with only one death, it is a question whether we ought to advocate this method ever in the treatment of placenta previa.

To go back again, these very gentlemen admit themselves, it is impossible to make the diagnosis of a central implantation. If they can show

the case is a primiparous woman and has a centrally implanted placenta, then Cæsarean section is indicated. Yet, in the next breath they tell us, "You can't tell the variety until labor starts."

Now for the point to which Dr. Boyd called attention, the one point which covers the whole substance of the matter, that is, that each case is a law to itself. You may have a case in the maternity hospital with all the modern appliances; you may have one away in a little two-story house; another away off in a farm house. In each case you must serve the interests of both the child and the mother by using the method best adapted to that particular case and its environment.

CONSTITUTION AND BY-LAWS OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

CONSTITUTION.

ARTICLE I.—NAME OF THE ASSOCIATION.

The name and title of this organization shall be the State Medical Society of Wisconsin.

ARTICLE II.—PURPOSES OF THE SOCIETY.

The purposes of this Society shall be to federate and bring into one compact organization the entire medical profession of the State of Wisconsin, and to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life.

ARTICLE III.—COMPONENT SOCIETIES.

Component Societies shall consist of those county medical societies which hold charters from this Society.

ARTICLE IV.—COMPOSITION OF THE ASSOCIATION.

SECTION I. This Society shall consist of Members, Delegates and Guests.

SEC. 2. MEMBERS. The Members of this Society shall be the members of the component county medical societies.

SEC. 3. DELEGATES. Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Society.

SEC. 4. GUESTS. Any distinguished physician not a resident of this State may become a guest during any Annual Session upon invitation of the officers of this Society, and shall be accorded the privilege of participating in all of the scientific work of that Session.

ARTICLE V.—HOUSE OF DELEGATES.

The House of Delegates shall be the legislative and business body of the Society, and shall consist of (1) Delegates elected by the component county societies, and (2), *ex-officio*, the officers of the society as defined in this Constitution.

ARTICLE VI.—COUNCIL.

SECTION 1. The Board of Trustees, or, as in this Constitution and By-Laws, designated the Council, shall consist of twelve Councilors elected by the House of Delegates, and the President and Secretary, *ex officio*. Besides its duties mentioned in the By-Laws, it shall have charge of and control all the property of this society of whatsoever nature and of all funds from whatsoever source.

SEC. 2. No person shall expend, or use for any purpose, money belonging to the Society without the approval of the Council.

SEC. 3. All acts of the House of Delegates involving the expenditure, appropriation or use in any manner, of money, or the acquisition or disposal in any manner of property of any kind belonging to the Society, must be approved by the Council.

SEC. 4. The Council shall formulate rules governing the expenditure of money to meet the necessary running expenses and fixed charges of the Society, as well as such other rules governing its actions, as it may deem necessary or desirable. Six members of the Council shall constitute a quorum for the transaction of business.

ARTICLE VII.—SECTIONS AND DISTRICT SOCIETIES.

The House of Delegates may provide for a division of the scientific work of the Society into appropriate Sections, and for the organization of such Councilor Districts as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE VIII.—SESSIONS AND MEETINGS.

SECTION 1. The Society shall hold an Annual Session, during which there shall be held daily General Meetings, which shall be open to all registered members, and guests.

SEC. 2. The time and place for holding each Annual Session shall be fixed by the House of Delegates.

ARTICLE IX.—OFFICERS.

SECTION 1. The officers of this Society shall be a President, three Vice-Presidents, a Secretary, a Treasurer, and ten Councilors.

SEC. 2. The President and Vice-Presidents shall be elected for a term of one year. The Secretary and the Treasurer shall be elected by the Council

at its Annual Meeting in January, and each shall hold his office for one year. The Councilors shall be elected for terms of five years each, being so divided that two shall be elected each year. All of these officers shall serve until their successors are elected and installed.

SEC. 3. The officers of this Society shall be elected by the House of Delegates on the morning of the last day of the Annual Session, but no Delegate shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any office who is not in attendance upon that Annual Session and who has not been a member of the Society for the past two years.

ARTICLE X.—RECIPROCITY OF MEMBERSHIP WITH OTHER STATE SOCIETIES.

To broaden professional fellowship among the State Societies, the State Medical Society of Wisconsin by its President and Secretary, is ready to arrange with other State Medical Societies, having equal requirements, for the interchange of certificates of membership. Members removing from one of these States to another may thus avoid the formalities of re-election..

ARTICLE XI.—FUNDS AND EXPENSES.

Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall be fixed by the House of Delegates, but shall not exceed the sum of $2.00 per capita per annum, except on a four-fifths vote of the Delegates present. Funds may also be raised by voluntary contributions, from the Society's publications, and in any other manner approved by the House of Delegates.

ARTICLE XII.—REFERENDUM.

SECTION 1. A General Meeting of the Society may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates, and when so ordered the House of Delegates shall submit such question to the members of the Society, who may vote by mail or in person, and, if the members voting shall comprise a majority of all the members of the Society, a majority of such vote shall determine the question and be binding on the House of Delegates.

SEC. 2. The House of Delegates may, by a two-thirds vote of its own members, submit any question before it to a general referendum, as provided in the preceding section, and the result shall be binding on the House of Delegates.

ARTICLE XIII.—THE SEAL.

The Society shall have a common Seal, with power to break, change or renew the same at pleasure.

ARTICLE XIV.—AMENDMENTS.

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the Delegates present at any Annual Session, provided that such amendment shall not be acted on until the day following that on which it was introduced.

BY-LAWS.

CHAPTER I.—MEMBERSHIP.

SECTION 1. The name of a physician on the properly certified roster of members of a component society, which has paid its annual assessment, shall be *prima facie* evidence of membership in this Society and all the rights and privileges pertaining thereto.

SEC. 2. Any person who is under sentence of suspension or expulsion from a component society, or whose name has been dropped from its roll of members, shall not be entitled to any of the rights or benefits of this Society, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

SEC. 3. Each member in attendance at the Annual Session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified, by reference to the roster of his society, he shall receive a badge, which shall be evidence of his right to all the privileges of membership at that Session. No member shall take part in any of the proceedings of an Annual Session until he has complied with the provision of this section.

CHAPTER II.—ANNUAL AND SPECIAL SESSIONS OF THE SOCIETY.

SECTION 1. The Society shall hold an Annual Session at such time and place as has been fixed at the preceding Annual Session.

SEC. 2. Special meetings of either the Society or of the House of Delegates shall be called by the President on petition of twenty delegates or fifty members.

CHAPTER III.—GENERAL MEETINGS.

SECTION 1. All registered members may attend and participate in the proceedings and discussions of the General Meetings and of the Sections. The General Meetings shall be presided over by the President or by one of the Vice-Presidents, and before them shall be delivered the address of the President and the orations.

SEC. 2. The General Meeting may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and public.

CHAPTER IV.—HOUSE OF DELEGATES.

SECTION 1. The House of Delegates shall meet annually at the time and place of the Annual Session of the Society, and shall fix its hours of meeting so that they shall not conflict with the General Meetings of the Society. But if the interests of the Society and profession require, the House of Delegates may meet in advance, or remain in session after the adjournment of the General Meeting.

SEC. 2. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every 50 members, and one for each major fraction thereof, but each component society which has made its annual report and paid its assessment as provided in this Constitution and By-Laws, shall be entitled to one delegate.

SEC. 3. A majority of the delegates registered shall constitute a quorum.

SEC. 4. It shall, through its officers, Council and otherwise, give diligent attention to and foster the scientific work and spirit of the Society, and shall constantly study and strive to make each Annual Session a stepping stone to future ones of higher interest.

SEC. 5. It shall consider and advise as to the material interests of the profession, and of the public in these important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public-health legislation, and to diffuse popular information in relation thereto.

SEC. 6. It shall make careful inquiry into the condition of the profession in each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality, and shall continue these efforts until every physician in every county of the State who can be made reputable has been brought under medical society influence.

SEC. 7. It shall encourage post-graduate and research work, as well as home study, and shall endeavor to have the results utilized and intelligently discussed in the county societies.

SEC. 8. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

SEC. 9. It shall, upon application, provide and issue charters to county societies organized to conform to the spirit of this Constitution and By-Laws.

SEC. 10. In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies to be designated by hyphenating the names of two or more counties so as to distinguish them from district and other classes of societies, and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies, until such counties may be organized separately.

SEC. 11. It shall divide the State into Councilor Districts, specifying what counties each district shall include, and, when the best interest of the Society and profession will be promoted thereby, organize in each a district medical society, and all members of component county societies shall be members in such district societies. When so organized, from the presidents of such district societies shall be chosen the Vice-Presidents of this Society, and the presidents of the county societies of the district shall be the vice-presidents of such district societies.

SEC. 12. It shall have authority to appoint committees for special purposes from among members of the Society who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and may be present and participate in the debate on their reports.

SEC. 13. It shall approve all memorials and resolutions issued in the name of the Society before the same shall become effective.

CHAPTER V.—ELECTION OF OFFICERS.

SECTION 1. All elections shall be by ballot, and a majority of the votes cast shall be necessary to elect.

SEC. 2. The House of Delegates on the first day of the Annual Session shall appoint a Committee on Nominations consisting of ten delegates, no two of whom shall be from the same councilor district. The Committee shall report to the House of Delegates one or more names for each office to be filled. No two candidates for President shall be named from the same county. Any person known to have solicited votes for or sought any office within the gift of this Society shall be ineligible for any office for two years.

SEC. 3. The report of the Nominating Committee and the election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the General Session.

SEC. 4. Nothing in this article shall be construed to prevent additional nominations being made by members of the House of Delegates.

CHAPTER VI.—DUTIES OF OFFICERS.

SECTION 1. The President shall preside at all meetings of the Society and of the House of Delegates; shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged, and perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office, and, as far as practicable, shall visit by appointment the various sections of the State, and assist the councilors in building up the county societies, and in making their work more practical and useful.

SEC. 2. The Vice-President shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the Council shall select one of the Vice-Presidents to succeed him.

SEC. 3. The Treasurer shall give bond in the sum of $——. He shall demand and receive all funds due the Society, together with the bequests and donations. He shall pay money out of the Treasury only on a written order of the President, countersigned by the Secretary; he shall subject his accounts to such examination as the House of Delegates may order, and he shall annually render an account of his doings and of the state of the funds in his hands.

SEC. 4. The Secretary shall attend the General Meetings of the Society and the meetings of the House of Delegates, and shall keep minutes of their respective proceedings in separate record books. He shall be *ex-officio* Secretary of the Council. He shall be custodian of all record books and papers belonging to the Society, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Society which come into his hands. He shall provide for the registration of the members and delegates at the Annual Sessions. He shall, with the co-operation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the State by counties, noting on each his status in relation to his county society, and, on request, shall transmit a copy of this list to the American Medical Association. He shall aid the Councilors in the organization and improvement of the county societies

and in the extension of the power and usefulness of this Society. He shall conduct the official correspondence, notifying members of meetings, officers of their election and committees of their appointment and duties. He shall employ such assistants as may be ordered by the Council or the House of Delegates, and shall make an annual report to the House of Delegates. He shall supply each component society with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessment, collect the same, and at once turn it over to the Treasurer. Acting with the Committee on Scientific Work, he shall prepare and issue all programs. The amount of his salary shall be fixed by the Council.

CHAPTER VII.—COUNCIL.

SECTION 1. The Council shall meet daily during the Annual Session of the Society and at such other times as necessity may require, subject to the call of the chairman or on petition of three Councilors. It shall meet on the last day of the Annual Session of the Society to outline work for the ensuing year. It shall elect a chairman and a clerk, who, in the absence of the Secretary of the Society, shall keep a record of its proceedings. It shall, through its chairman, make an annual report to the House of Delegates.

SEC. 2. Each Councilor shall be organizer, peace-maker and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist; for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his work and of the condition of the profession of each county in his district at the Annual Session of the House of Delegates. The necessary traveling expenses incurred by such Council in the line of the duties herein imposed may be allowed by the House of Delegates on a proper itemized statement, but this shall not be construed to include his expenses in attending the Annual Session of the Society.

SEC. 3. The Council shall be the board of censors of the Society. It shall consider all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Society. All questions of an ethical nature brought before the House of Delegates or the General Meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or component societies on which an appeal is taken from the decision of an individual Councilor. An appeal from the decision of the Council may be taken to the House of Delegates.

SEC. 4. In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies, to be suitably designated so as to distinguish them from district societies, and these societies, when organized and chartered, shall be entitled to all rights and privileges provided for component societies until such counties shall be organized separately.

SEC. 5. The Council shall provide for and superintend the publication and distribution of all proceedings, transactions and memoirs of the Society, and shall have authority to appoint an editor and such assistants as it deems necessary. All money received by the Council and its agents, resulting from

the discharge of the duties assigned to them, must be paid to the Treasurer of the Society, and all orders on the Treasurer for disbursements of money must be approved by the Council. It shall annually audit the accounts of the Treasurer and Secretary and other agents of this Society and present a statement of the same in its annual report to the House of Delegates, which report shall also specify the character and cost of all the publications of the Association during the year, and the amount of all other property belonging to the Society under its control, with such suggestions as it may deem necessary. In the event of a vacancy in the office of the Secretary, or the Treasurer, the Council shall fill the vacancy until the next annual election.

CHAPTER VIII.—COMMITTEES.

SECTION 1. The standing committees shall be as follows:

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Nominations.

A Committee on Arrangements, and such other committees as may be necessary. Such committees shall be elected by the House of Delegates, unless otherwise provided.

SEC. 2. The Committee on Scientific Work shall consist of three members, of which the Secretary shall be one, and shall determine the character and scope of the scientific proceedings of the Society for each session, subject to the instructions of the House of Delegates. Thirty days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers, discussions and other business shall be presented.

SEC. 3. The Committee on Public Policy and Legislation shall consist of three member and the President and Secretary. Under the direction of the House of Delegates it shall represent the Society in securing and enforcing legislation in the interest of public health and of scientific medicine. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and shall strive to organize professional influence so as to promote the general good of the community in local, state and national affairs and elections.

SEC. 4. The Committee on Nominations shall be appointed and perform its duties in accordance with the provisions contained in Chapter V of these By-Laws.

SEC. 5. The Committee of Arrangements shall be appointed by the component society in whose jurisdiction the Annual Session is to be held. It shall provide suitable accommodations for the meeting-places of the Society and of the House of Delegates, and of their respective committees, and shall have general charge of all the arrangements. Its chairman shall report an outline of the arrangements to the Secretary for publication in the program, and shall make additional announcements during the session as occasion may require.

CHAPTER IX.—COUNTY SOCIETIES.

SECTION 1. All county societies now in affiliation with this Society or those which may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall,

on application, receive a charter from and become a component part of this Society.

SEC. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charters shall be issued thereto.

SEC. 3. Charters shall be issued only upon approval of the Council or House of Delegates and shall be signed by the President and Secretary of this Society. The Council or the House of Delegates shall have authority to revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

SEC. 4. Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the Councilor for the District if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

SEC. 5. Each county society shall judge of the qualification of its own members, but, as such societies are the only portals to this Society and to the American Medical Association, every reputable and legally registered physician who does not practice or claim to practice, nor lend his support to, any exclusive system of medicine, shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every such physician in the county to become a member.

SEC. 6. Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal, first to the Council and, finally, to the House of Delegates.

SEC. 7. In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a Board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

SEC. 8. When a member in good standing in a component society moves to another county in this State, his name, on request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves.

SEC. 9. A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

SEC. 10. Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

SEC. 11. At some meeting in advance of the Annual Session of this Society each county society shall elect a delegate or delegates to represent it in the House of Delegates of this Society, in the proportion of one delegate to

each fifty members or fraction thereof, and the Secretary of the Society shall send a list of such delegates to the Secretary of this Society, at least ten days before the Annual Sessions.

SEC. 12. The Secretary of each component society shall keep a roster of its members, and a list of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. In keeping such roster the Secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year. When requested, he shall furnish, on blanks supplied to him for the purpose, an official report containing such information to the Secretary of this Society.

SEC. 13. The Secretary of each component society shall forward its assessment, together with its roster of officers and members, list of delegates, and list of non-affiliated physicians of the county to the Secretary of this Society between the first and tenth of April of each year.

SEC. 14. Any county society which fails to pay its assessment, or make the report required, on or before April 15, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Society or of the House of Delegates until such requirements have been met.

CHAPTER X.—MISCELLANEOUS.

SECTION 1. No address or paper before the Society except those of the President and orators, shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes, nor more than once on any subject except by unanimous consent.

SEC. 2. All papers read before the Society or any of the Sections shall become its property. Each paper shall be deposited with the Secretary when read.

SEC. 3. The deliberations of this Society shall be governed by parliamentary usage as contained in Roberts' Rules of Order, when not in conflict with this Constitution and By-Laws.

SEC. 4. The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

CHAPTER XI.—AMENDMENTS.

These By-Laws may be amended at any Annual Session by a majority vote of all the delegates present at that session, after the amendment has lain on the table for one day.

BOOK REVIEWS.

International Clinics—A Quarterly of Illustrated Lectures and especially prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and other Topics of Interest to Students and Practitioners by leading Members of the Medical profession throughout the world. Edited by A. O. J. Kelly, A. M., M. D., Philadelphia, U. S. A., with the Collaboration of Wm. Osler, M. D., Baltimore; John H. Musser, M. D., Philadelphia; Jas. Stewart, M. D., Montreal; John B. Murphy, M. D., Chicago; Thomas M. Rotch, M. D., Boston; John G. Clark, M. D., Philadelphia; James J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh; John Harold, M. D., London; Edmund Landolt, M. D., Paris; Richard Kretz, M. D., Vienna, with Regular Correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels, and Carlsbad. Cloth, $2.00. Volume 1. Thirteenth Series, 1903. Philadelphia, J. B. Lippincott Company, 1903.

With this volume the International Clinics makes its appearance under the management of a new editorial staff, and we find added to the list of editorial collaborators a number of names familiar to all who keep in touch with the scientific aspect of medicine and surgery.

Though International Clinics has made something of a reputation in the past, it bids fair to improve upon this in the future and if the present volume is a fair index of what is to come we shall look for future numbers with pleasurable anticipation.

It is, of course, not possible to mention all the articles that appear in this volume, but a few of them appear of such interest as to merit special notice.

Osler contributes a 40 page article on "Aneurism of the Descending Thoracic Aorta" based upon a study of some 14 cases under his observation in the Johns Hopkins Hospital. The article by Satterthwaite on "Nauheim Methods in Chronic Heart Disease with American Adaptations" is both interesting and instructive, and is made particularly so by the 15 illustrations which accompany the text. Thomas Jonnesco of Bucharest contributes an article on "Bilateral Resection of the Cervical Sympathetic in Basedow's Disease," in which he details the histories of two cases treated in this manner and in which the results have been both satisfactory and, so far, permanent. He concludes that this operation offers decided advantages over partial thyroidectomy and should be recommended and employed in severe cases.

Other articles of note appearing in this volume are: Primary Intestinal Tuberculosis, by Frank Billings; Surgical Clinics, by Senn and Keen; Convulsions in Young Children, by John Thomson; Treatment of Weak Feet and Flat Feet, by A. R. Shands; General Principles of Embryology, by J. W. Ballantyne.

The volume ends with a Review of the Progress of Medicine during the Year 1902, by E. W. Watson and H. W. Cattell.

As a whole the book is to be commended to the reader, and the JOURNAL extends to the new management its best wishes for the future success of **International Clinics.**

International Clinics. Vol. II.

This—the second volume appearing under the new editorial management—completely fulfils the promise of the preceding one. The volume opens with a series of valuable papers by various authors on the Summer Diarrheas of Children, followed by an article on Disease of the Pancreas, by Opie, and another under the same title by Deaver and Muller. These are all very interesting and instructive papers. It is not possible to mention all the articles in this volume in a brief review, but two appearing under the department of "Treatment" merit special mention. These are "Trunecek's Serum in Arteriosclerosis" by Leopold Levi of Paris, and "A Recent Advance in Therapeutics; Local Treatment" by Charles Bouchard, also of Paris. The great number of cases of Arteriosclerosis treated by Trunecek's Serum and the apparently good results achieved, would seem to indicate that in this "Serum" we have a valuable remedy. Bouchard's article offers much food for reflection and opens a field of investigation not hitherto widely travelled. The article by Haig on the "Etiology, Prevention and Treatment of a Common Cold" gives the writer an opportunity of insisting upon the important part played by uric acid in the matter of etiology, which accords with his often expressed views.

The remaining papers, coming under the departments of Surgery, Pediatrics, Obstetrics, Gynecology and Ophthalmology, are all of a high standard of excellence, that of E. Stanmore Bishop of Manchester, England, on Abdomino-Pelvic Diagnosis, deserving special mention. (W. H. W.)

CURRENT LITERATURE.

NERVOUS AND MENTAL DISEASES.

Wm. F. Becker, M.D., Wm. F. Wegge, M.D.

Syphilitic Toxemic Hemiplegia.— CHARLES W. BURR (*American Medicine*, May 2, 1903) cites the case of a married woman, aged 25 years, who denied venereal infection, and had been an excessive drinker. She had received a blow upon the head a few days before the onset of a severe headache, succeeded by delirium and on the following day by unconsciousness and convulsions, without palsy. No mention is made of the presence of any physical signs of syphilis, neither did physical examination reveal anything more than a transient albuminuria in addition to symptoms referable to the nervous system. At this time the left pupil was dilated and did not respond to light. The right pupil was normal. The bladder was incontinent.

Two days after the onset of unconsciousness the left arm and leg were more relaxed than the right. On the following day the eye-ground was normal and the patient partially conscious. She was then put on mercurial inunctions.

Consciousness returned gradually, but the left lower face became slightly palsied and there developed a distinct ptosis of the left lid while voluntary motion in the distal portions of the left arm and left leg returned gradually.

The knee jerk on the left side was more marked. The bladder remained incontinent. Improvement was marked by the seventh day after the onset of the symptoms, and a week later all of the symptoms had practically disappeared.

After excluding hysteria, uremia, cerebral hemorrhage, tumor, gumma, syphilitic endarteritis and various intoxications, the author concludes that the symptoms were due to syphilitic toxemia, basing his diagnosis upon the facts that she bore daily inunctions of mercury well, grew fat under them, and that the symptoms themselves were characteristic of syphilis.

(W. F. W.)

The Pathology of Old Peripheral Facial Paralyses.—M. BERNHARDT (*Berlin. Klin. Wochenschr.*, May 11, 1903) refers to the studies of Placzek published in 1893, in which this author calls attention to the contradictory fact that in cases of peripheral facial paralysis of long standing, in which no voluntary contraction can be induced, electrical reaction may be little altered. Bernhardt reports five cases of old, severe cases of facial paralysis in which similar conditions obtained, with this difference that, whereas in Placzek's cases all of the branches of the facial nerve presented this peculiarity, in the author's cases it was found only in the upper branches of the nerve. Not all cases of peripheral paralysis, including peripheral paralysis of the facial, present this phenomenon—in fact these cases are rare.

In discussing the causes producing it, he calls attention to the well-known fact that in cases of peripheral facial paralysis not all branches are affected to the same extent, and that in cases of apparently complete recovery of active mobility, electrical excitability on the affected side may be found reduced as compared with the healthy side, for years thereafter.

He refers to the explanation of this condition offered by Erb, based upon the theory of Shiff, Erb, Ziemssen-Weiss, Gruenhagen and others, that the medullary sheath receives the impulses and the axis cylinder conducts them. Erb assumes that irritability of the regenerated fibres does not return until they are covered by a medullary sheath of a certain thickness, and therefore have arrived at a certain stage of development, while conduction is possible at an earlier stage.

Placzek has assumed that in his cases an axial neuritis was present, and that the medullary sheath instead of developing later, is, in fact, the first to develop, while the affection of the axis cylinder continues.

The author finds it impossible to accept this theory in view of our present knowledge of the regeneration of peripheral nerves.

He calls attention to the fact that even mild palsies may continue for months without appreciable changes in the distal portions of a nerve, without a return of voluntary motion; with inability to elicit contraction by electrical excitation of the central portion of the nerve, and without loss of electrical irritabiliy of the peripheral portion. Conditions quite similar to those occur in the class of cases of paralysis of long standing under consideration. He assumes that in both classes of cases conditions resulting in the phenomenon under consideration remain at the seat of lesion. He finds it impossible to give any reasonable explanation of these conditions.

(W. F. W.)

CONSTITUTION OF THE AMERICAN CONFEDERATION OF RECIPROCATING, EXAMINING AND LICENSING MEDICAL BOARDS OF THE UNITED STATES OF AMERICA.

ARTICLE I.

The name of this organization shall be the American Confederation of Reciprocating, Examining and Licensing Medical Boards.

ARTICLE II.

The object of this Confederation shall be to establish reciprocal relations between the medical examining and licensing boards of the states, territories, districts and provinces of the United States; the purpose of which being that thoroughly worthy and well qualified physicians and surgeons who have been legally authorized to practice under the laws of one of said states, territories, districts or provinces, may be given legal authority and be admitted to practice in any state, territory, district or province represented in this Confederation without a repetition of the tests of qualification to which such practitioner has submitted.

ARTICLE III.

The officers of this Confederation shall be a president, first and second vice president, secretary and treasurer, whose duties shall be those usual to said officers and who shall be elected annually by the Confederation and retain their respective offices until their successors are elected and qualified.

ARTICLE IV.

Additional to the officers mentioned in Article III., there shall be an Executive Council, composed of an authorized representative of each state board represented in this Confederation, whose duty shall be to take advisory oversight of the affairs of the Confederation, audit claims and accounts and make recommendations as to the business affairs of the Confederation.

ARTICLE V.

Any examining or licensing board or any state, territory, district or province of the United States having a medical practice law requiring an examination before said board and requiring thorough professional qualification as the basis of legal authority to practice in said state, territory, district or province shall be eligible to membership in this Confederation and may obtain membership by the signature of its authorized representative to this Constitution and maintain such membership by compliance with the requirements of the Constitution and By-laws of the Confederation.

ARTICLE VI.

The annual dues to the Confederation shall be such an amount proportioned among the Boards composing the Confederation as may be necessary to meet the expenses as found and allowed by the Executive Council.

ARTICLE VII.

It shall be the duty of each examining or licensing board having membership in this Confederation to draft and spread of record in its home office a resolution embodying the basis of reciprocal recognition of applicants from other reciprocating states.

SIGNATURES TO THE ABOVE CONSTITUTION.

John R. Currens, President, Wisconsin Board of Medical Examiners.

W. A. Spurgeon, President, Indiana Board of Medical Examiners.

Beverley D. Harison, Secretary, Michigan State Board of Registration in Medicine.

William Bell, President, Michigan State Board of Registration in Medicine.

J. A. McKlveen, President, Iowa State Board of Medical Examiners.

R. E. Conniff, Member, Iowa State Board of Medical Examiners.

L. F. Towers, Member, Ohio State Board of Medical Registration and Examination.

H. H. Baxter, Member, Ohio State Board of Medical Registration and Examination.

William Gott, Secretary, Indiana State Board of Medical Registration and Examination.

M. S. Canfield, Member, Indiana State Board of Medical Registration and Examination.

S. W. Williston, Member, Kansas State Board of Medical Registration and Examination.

THE WISCONSIN
MEDICAL JOURNAL

NOVEMBER, 1903

GOITRE.*

BY JOHN T. ROGERS, M. D.,

ST. PAUL, MINN.

Prof. Adami, of Montreal, defines goitre as follows: "The terms goitre, bronchocele, and struma include all those conditions in which there is a persistent enlargement of the whole or portion of the thyroid gland."

The enlargement may be malignant or benign. It is to the benign condition that I wish to call your attention to-day. The simplest classification is that proposed by Virchow thirty years ago. Though not absolutely accurate, practically, it answers every purpose. His classification is: first, simple hyperemia; second, vascular goitre; third, parenchymatous goitre which includes adenomata, colloid goitre and cystic goitre; fourth, fibrous goitre. It is often impossible to differentiate these varieties clinically, and in many instances there may be a mixture of several varieties in a single goitre; however, we should in every case use our utmost endeavor to properly classify the conditions before advising treatment. Let us briefly consider the individual types of Virchow.

First. Simple hyperemia, as its name would suggest, is usually a slight affair caused by pregnancy or more often by menstruation, in young girls. In several instances I have seen simple hyperemia in a so-called neurasthenic individual. It usually disappears, but may recur. Frequent recurrences of this condition may leave a permanent disease of the thyroid.

*Read before the Inter-County Medical Society, New Richmond, Wis., July 21, 1903.

Second. Vascular goitre occurs usually in the young, is pulsating, and a murmur is often present. It can be considerably reduced in size by pressure.

Third. Parenchymatous goitre, as described by Dennis, presents various appearances. "If the process is diffuse, and the follicles small, the result is a small, smooth, elastic tumor. In most cases the growth is irregular and nodules (adenomata) are formed, or the contents of the follicles increase and undergo colloid degeneration (colloid goitre). The septa between these may atrophy, and cysts are formed filled with gelatinous fluid of varying consistency, and more or less stained with blood (cystic goitre). The adenomatous nodules are firm and often completely encapsulated. They may reach the size of an egg."

Fourth. Fibrous goitre is one in which there is diffuse overgrowth of fibrous tissue.

Adami says these are always nodular and the nodules may be recognized by their peculiar firmness and hardness.

ETIOLOGY. The cause of goitre is still unknown. Many theories have been advanced, but none accepted. Kocher, in an examination of 76,000 school children in Switzerland, demonstrated that the water supply was a positive source of goitre. Just what constituents or constituent of the water caused the condition, has not been determined.

That it is endemic in certain localities is a well known fact. It is epidemic only in such endemic localities. Heredity is an important factor. It is rarely congenital and when so found is almost, if not quite, invariably fatal.

No race is exempt. It usually occurs about the age of puberty. Females are much more likely to be affected than males. St. Sager puts the proportion at 44 to 1. Fisher says 80 to 90 per cent. occur in women. Lower animals, especially in endemic regions, very commonly develop goitre. It may occur in any one or all three lobes of the thyroid or in an accessory thyroid.

In making examination of all tumors of the neck, accessory thyroids should be taken into consideration.

SYMPTOMS. In the acute forms the symptoms are very severe and consist of alarming dyspnea, paroxysmal in nature, impeded respiration, prolonged inspiration, venous engorgement of the face and head, hoarseness, and sometimes death from asphyxia. In chronic goitre there may be no discomfort or no symptoms even where the goitre has grown to considerable proportions. Symptoms will often depend upon the exact location of the growth. In one case, that of a young man twenty-three years of age, the isthmus so pressed upon the trachea that frequent attacks of dyspnea were caused, and simply ligating and

cutting through the isthmus relieved all the symptoms. In this case there was a relatively small enlargement of the gland.

In the chronic, as well as in the acute forms, most of the symptoms are those of pressure, either upon the trachea or the recurrent laryngeal. Some of these patients have catarrhal conditions of the respiratory mucous membranes, and in several instances I have seen severe asthmatic attacks resulting from an enlarged thyroid. Where the pressure is sufficient to produce venous obstruction, the skin of the face assumes a peculiar dusky appearance. The nervous symptoms—manifested by exophthalmus, palpitation, tremor and tachycardia—are not infrequently present. These patients are frequently neurasthenic, irritable, and easily tired out upon moderate exertion. Their dispositions change, they become morose, and unhappy or very excitable. These nervous symptoms may occur even where there is no exophthalmus, no palpitation, no tachycardia. Marcocchi and Antonini say that subjects of goitre become insane about nine times as frequently as normal subjects. The degenerative and puerperal forms of insanity predominate in goitrous cases. Goitrous patients with curable forms of insanity recover as frequently as do non-goitrous, nor is there any special difference in the duration of the disease. The thyroid gland, they conclude, has a direct action upon the central nervous system. In rare cases myxedema develops.

DIAGNOSIS. The diagnosis of enlarged thyroid is a comparatively simple matter, except in cases of accessory thyroids. We can scarcely make a mistake when we remember its position and the fact that it always moves up and down with deglutition.

In making a differential diagnosis between malignant and non-malignant goitres, James Berry says that "when in the thyriod of a person over forty years of age a tumor appears which is hard, which steadily and rapidly increases in size, which is not of an inflammatory nature, the malignancy of such a tumor should be strongly suspected." Under this head let me again repeat that we should use our utmost endeavor to classify each individual goitre before beginning treatment.

PROGNOSIS. Many cases of long standing goitre are observed in endemic regions in which there are no symptoms, and the patients live out their natural term of life. In parenchymatous goitre and in the simple hyperemias developing at puberty, the prognosis is affected by the effects of treatment. The prognosis in the surgical cases is extremely good. Various authors place the mortality from three to less than one-half per cent.

TREATMENT. It may be divided into medical and surgical. In the medical, thyroid extract and iodine are the chief drugs. Electric-

ity has some advocates, but has been pretty generally discarded. Koenig recommends iodine more especially in the hypertrophic and follicular forms. In the parenchymatous forms in young adults thyroid extract or iodine may be curative, especially in the early stages of the disease. Berry says: "These remedies may also produce some improvement in soft adenomas occurring in young people." Injection of the various forms of iodine for the cure of goitre is, in my opinion, to be condemned. If internal medicine does not cure, injections will not.

After three months of medical treatment the case becomes surgical. We are indebted to Kocher more than to any other man for our knowledge of the surgical treatment of goitre.

The indications for operation are: rapidly developing growth, especially if solid, and dyspnea; occasionally deformity alone is sufficient ground for operation. The operation is especially indicated in those cases where there is evidence of exophthalmus and the train of nervous symptoms which usually accompany this symptom. In cases with recurring asthmatic attacks operation should be performed. In rare instances dysphagia is an indication for operation. Hoarseness and bronchial irritation are decided indications.

The operation to be performed in these cases must of necessity be adapted to the individual growth. In cystic goitres enucleation with drainage is all that is necessary. Small adenomata should be enucleated, and large adenomata call for a partial thyroidectomy.

The dangers of operation are: Hemorrhage, the anesthetic, acute thyroid poisoning from squeezing the secretion out of the gland, sepsis, injury to the recurrent laryngeal, air embolism from opening a large vein, injury to the trachea, myxedema. An appreciation of these dangers and a thorough knowledge of the anatomy of the part are prerequisites of success and make the operation a comparatively simple affair.

Chloroform and ether, as I have said before, are dangerous, and should not be used unless local anesthesia is a failure. In one or two instances I have been compelled to give a small amount of ether while operating under local anesthesia.

After thorough antiseptic preparation of the neck, infiltrate a line with Schleich's solution. The incision should extend across the neck in a curved direction with the convexity downward following the natural creases of the neck, low enough to be covered by a collar. If a subcutaneous suture is used after such an incision the scar is hardly noticeable. After cutting through the platysma the deeper structures should be infiltrated with Schleich's solution. The sterno-mastoid should be dissected loose for a sufficient distance to allow easy retraction. All vessels in sight should be cut between clamps and ligated at

once. The veins are especially liable to be thin walled and easily torn. If it is desirable to remove only one lobe of the thyroid an incision extending only to the middle line is sufficient. Retracting the sternomastoid with blunt retractors leaves the lobe in full view. Lifting the lobe forward the superior and inferior thyroid vessels are brought into view and ligated, special care being taken with the inferior thyroid as the recurrent laryngeal lies directly underneath and may easily be clamped with the vessels. The lobe is still further dislocated until the isthmus is reached where the line of cleavage between the lobes is discovered; through this line an incision is made down to the trachea. A few blood vessels cross and can easily be picked up after the incision. In separating the gland from the trachea extreme care must be taken not to injure the recurrent laryngeal or the trachea itself. The whole gland should never under any circumstances, be removed. At least half of one lobe should be left. The wound is closed by a few deep sutures to obliterate dead spaces, the platysma is sutured with running catgut, a few strands of silkworm gut are left in for drainage and the skin wound closed subcutaneously. Occasionally the enlargement of the isthmus extends downward underneath the sternum, causing a great deal of dyspnea, especially when the patient is in the reclining position. In such cases it is well to dislocate this lobe upward before proceeding to the lateral lobe.

Before beginning any operation upon the neck Crile has demonstrated that a physiological dose of atropine prevents the sudden collapse of the heart and in doing this operation you should remember also not to pull down on the larynx, as in this way we may get sudden collapse.

It has been my custom to give a big drink of whiskey and 1-100th grain of atropine hypodermically twenty minutes before beginning the operation. In goitre, associated with exophthalmus, anesthesia is especially contra-indicated and dangerous, and, if possible, the patient should be kept absolutely at rest and drugs given to quiet the heart for several days before operation.

In this class of cases the immediate results of the operation are remarkably good. The nervous symptoms disappear almost immediately after operation and the exophthalmus is much improved, if not entirely cured. In exophthalmic goitre, where medicines have failed to cure and the condition is going on to one of gravity, I am convinced that the surgical treatment is the proper procedure.

Kocher ligates three of the vessels at several sittings and sometimes removes a portion of the gland, and his results have been excellent. In a recent case I removed a portion of the gland and ligated the superior thyroid, and at the present time the patient is markedly improved.

SHORTCOMINGS OF THE PHYSICIAN; PARTICULARLY IN HIS RELATIONS TO THE STATE, AND TO HYGIENE.*

BY A. F. FUCHS, M. D.,

LOYAL, WIS.

For some years I have been gathering a mass of material bearing upon the physician and the society in which he exercises his art. I have been doing a little study of a kind not generally indulged in by one of our profession, and as a result there have developed within me certain convictions on matters having to do with the welfare of mankind as a whole, which are not in accord with the views held by my colleagues. New facts, and the more recent opinions of others, have more firmly convinced me that the views I entertained some fifteen years ago are substantially correct to-day. The last meeting of the American Medical Association, and the recent meeting of prominent medical men at Washington, brought out utterances that tend to confirm me in my position. Some of the views I entertain were presented to you in 1897, others again in 1898. The last paper was inadequately discussed, and on the first a discussion was not had. If I again present a paper along similar lines, I do so because I think the society may now have time to discuss it, and profit thereby. Inasmuch as recent contributions, and others not so recent but with which I was wholly unacquainted, have exhaustively dealt with the biological side of my views, I will not take up your time by reiteration at length, but only briefly restate them.

First: The natural acquisition of or the recovery from a so-called specific, bacterial invasion, carries with it more or less perfect immunity against invasion by certain other bacteria. Hence, the surmountal of one disease, is not only an immunization against future attacks of the same, but a direct protection against some possible disease to which mankind is not now subject, and which may be far more dangerous.

Second: In the highly contagious diseases, contact infection is the rule; intermediate infection through wearing apparel, household articles, or particularly a well person is practically unknown.

Third: Infectious diseases always with us, but not generally epidemic, involve a recognition of the fact that the germs are widely distributed, either as ectophytes, saprophytes, or as active pathogenically in innumerable hosts. As a corollary, we postulate: such germs

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 3, 1903.

will be practically inexterminable. There has been established a reciprocal interdependence—eine beiderseitige Anpassung. It follows from the last postulation, that the only reasonable and efficient way in which to combat the ravages of such a disease is to strengthen, or improve, the nutrition of the host, and that,

Fourth: Closely related, or similar diseases (or their producing germs) occurring in domestic animals, practically never naturally invade man.

I have no ulterior motive in haling before your forum the physician. I merely wish to see how you will go at it in order to acquit him, if a wholesale acquittal is in order. Otherwise (or *per contra*), I want to see how each one goes to work to cast a stone at the other fellow. We all understand that the other fellow is never present. Like the Frenchman's flea, "when you have your finger on him he is not there." However, I may be suffering under an illusion, and there may be no fleas. If so, kindly disabuse me.

Shortcomings we are all subject to; with the minor delinquencies incident to human frailty, I will not trouble you. These consist of lack of consideration of our client's pocketbook. That is, when our demands upon it are considerable, but not considerate, and certain others you all can call to mind.

It may be a duty to ourselves to get as big a fee as we can, but let us not lay stress upon fee-tables, or measure a man's importance, intellect or culture by the fee he commands. We are all seeking a living; most of us are practising medicine for the living there is in it, some of us for the money we can get out of it, practically none for the reason that it is a noble *sic* and honorable *sic* profession. It is our duty as men to be frank; pretense should cease to be one of our shortcomings. We all blush when the annual presidential address is read, and we are told what a lot of noble fellows we are, and how much we do for charity and for suffering humanity in general.

The shortcomings of importance, those which hamper us in our usefulness as physicians (healers) and citizens, are an outgrowth of ignorance on the part of the profession as a whole, the ambitions of a large number, and the indifference, cowardice, or disinclination for strife of an intellectually strong, but numerically weak element within our ranks.

Our ignorance is subject to examination along two lines. Along those of the specialist, and along those involving a general philosophical view of the entire subject. The special line was recently invaded by Prof. Frank Billings, and while I have something to say of similar purport, it is but the questioning of one engrossed with the larger view. It is of course understood that I have not reference to

that special kind of special learning which makes a specialist. That lies beyond the scope of this paper. That is one of the things that are holy, and may not be approached by one not initiated into its mysteries. Nor have I reference to that technical skill and learning incident to surgery. I mean only that learning which one is expected to have who fills the place of physician to-day. If we trust Billings, the overwhelming majority of graduates to-day are wholly incompetent. What then shall we say of those who graduated twenty and twenty-five years back, after ten months' meager schooling? Not one per cent. of the graduates of that time had even the rudiments of laboratory instruction in physiology, if possible even a smaller number had any knowledge of physics, and practical histology was an unknown quantity. The microscope was looked at from a distance, and our entire knowledge of instruments of precision and the human body, was what we got in the dissecting room. Thus were we turned loose upon humanity—those who had used the all too brief time in study, along with those who had wasted it in idleness and mere sight-seeing; those endowed with a modicum of brains, some modesty, and the capacity to learn, along with those possessed of immense gall, self-conceit, and the ambition to "get there, Eli." A few, a very few, of this army of incapables forthwith went to Germany, in order to get a year or more of decent instruction; the majority went at once into practice. Of these last a certain per cent. took a post-graduate course of three or six months in later years, and then opened up as specialists and potential professors. Some went to work quietly, developed their minds, and have become men.

The greater part, if not all, of the prominent medical men of to-day, particularly those occupying teaching positions, were "made in Germany." Each one of these professors, if at all ambitious to shine, gets out a text-book. The German authorities neglected to put the stamp on it, but, it is "Made in Germany" sure enough, so far as the technical and scientific details are concerned. Of course the student really thinks it is the work of an American author, perhaps of his teacher, and he marvels, "that one small head could carry all he knew." But, the student learns better after awhile, "und machts ihm fleissig nach." Of course a knowledge of the science and art of medicine is common property, so these books are very much alike; the majority have no individuality,—they can have none. Some, to make up for originality in the text, I suppose, are highly embellished with illustrations. One that I bear in mind, is a veritable picture gallery of beautiful women in the nude. Actual reproductions from photographs, I assure you. These beauties, dizzy blondes and dreamy

brunettes, are to be had at $5 for the lot. Certainly cheap when we consider that they come from a Methodist Episcopal Hospital, and from the City of Churches at that. The book is not in my library. I bought a copy for the purpose of studying the artistic taste of American writers, but sent it back because I could not afford to properly clothe the ladies, and keep them from profane eyes. I give you my word as a "Kenner," the illustrations were not "Made in Germany," nor are they imitations of German art. Whether they are typical of American art, or lack of art, you are to judge. Does it tickle our pride as American doctors, or cause a blush?

But these writers do not confine themselves to writing on the subjects they teach, or which they make the object of their practice or special study. We have a History of Medicine by a surgeon, untold articles on hygiene, epidemiology, alcohol, pharmaco-dynamics, the physiology of digestion, pedagogics, the dangers of tuberculosis and its treatment, the threatened invasion of our country by plague, or cholera, all written by neurologists, dermatologists, gynecologists, alienists, ophthalmologists, *et hoc genus omne galore.* The medical profession, as a whole, seems to enjoy this, at least it does not complain. Of course it is taken for granted that the man who wrote the History of Medicine, is a greco-latino-indo-chinese-assyrio-semitic-franco-germanic scholar, and had access to the original manuscripts and papyri. At least he read good translations of the Susruta, and the more ancient or more recent, other Old Fellows. Neither he nor the others who are pelting us with literature (the original parts of which are not good, and the good parts not original), could have read Petrarch's opinion of the medical men of his time, otherwise they might have taken counsel and foregone the pleasure of appearing in print.

But we need entertain no hope that the hail of literature will stop, unless a vigorous protest is entered. Writing for journals and for book concerns is the main part of their stock-in-trade; it's advertising, and it is paid for by us poor victims, who bite at any old thing. Follow Osler's advice and buy no new books, buy old ones. Subscribe to good medical journals with the firm resolve that you will criticise everything that appears therein. If you pass adversely on everything, you will only be wrong five times out of a hundred. Strike now, for the elevation and the salvation of your profession, strike for it always and persistently. Put the fervor of the religionist in your language. Nay, more, make your art and your science your religion, then it will broaden and ultimately become part of you. Then there will be individuality, and the grasp you have of the phenomena about you, will

grow and become more and more ample with your years. "With malice toward none, and charity for all," protest against such views as those recently uttered by Keen and Anders. Show them what the advocacy of their views upon one *little* matter has to do with the increase of suffering, and the retardation of knowledge. Let the profession show the world that it is not in accord with Keen when he says it is immaterial what a physician's opinions are "on protection as against free trade." Impress it upon Keen that principles and policies that are guides to conduct are not to be put into the same category with the question, "Who wrote Hamlet?" As an example, ask Keen if it makes no difference whether the poor down south get their quinine at 50c or $6.00 an ounce. Whether we create, by due process of law, a couple of multi-millionaires in Philadelphia, by taking the bread out of the mouths of starving thousands, or have a few millionaires less. "But still the Great have Kindness in reserve,—They help to bury whom they help to starve." And they erect Medical Research Institutes, to find out how they starved. I will not enlarge upon the views I entertain regarding what Keen said in connection with his remarks on the Rockefeller Institute. Certainly the apotheosis of Rockefeller was somewhat premature. "To juggle with the means of industry, to crush free interchange," to take millions from the poor and give princely endowments to a useless institute and a more useless University, "seem to be the pursuits which entitle him to be considered a benefactor of mankind." The colleges complained of by Billings will disappear of themselves, just so soon as they cease to pay, and not before. Sweep before your own door first, and discourage everyone from entering the profession. I would say to you: discourage counsel with men connected with a medical college, or a hospital. If you have not the courage of your convictions, why, keep on in the old way and let every one know that the purchase of a professorship or position on a hospital staff, brings prestige. There are Proberts and Proberts in the business of selling such positions, and there are all kinds of men ready to buy their ware. Make places of learning, from common schools up to universities, true democracies, and you may hope to see improvements. Let it be known that professorial chairs are within the reach of all who will struggle for them in a free field, where no favors are asked or shown, and they will be struggled for by capable and honest men who will make teaching their lifework. Let it be known that Nepotism and Graft has no place in your institutes of learning called Medical Colleges. That nothing but ability counts in the securing of professorships; that influence, whether of wealth, social

or political standing, church membership, or the fact that you are your father's son, counts for nothing.

Your instruments of precision, your methods and technique, your pathology and your thought, are now all "Made in Germany." When you brought them over, and in continuing to bring them over, you but amplified upon the fool, who burdened himself with dross, and rejected the gold. But, you are not to blame; you did the best you could. I apprehend that the gold was not to be brought away; it is not "Made for Export." You took the shadow for the substance, as others have before you. "Ihr seht den Wald vor lauter Bäume nicht."

Year after year the leaders in our profession harp upon the necessity of properly endowed institutions, of endowments for special research, for special hospitals, for sanitariums for consumptives, and one calls for an endowed medical journal. All to come from the millions of one or a dozen multi-millionaires. "Bittere Ironie!" You are not going to "make a silk purse out of a sow's ear." Unless you realize that institutions are growths, and must of necessity ever remain growths, there is for you no deliverance from the evils complained of. If you as Americans, of puritan and cavalier descent, fail to grasp this truth, if you persist in preaching that benefactions may be purchased with gold, it is a good indication that you are not fit for better things. "Place not your trust in princes," above all not in money princes.

I have given you a rambling paper, and probably have failed to point out a single specific shortcoming. The many "fine things I have thought of in my cab" on my morning's drive, would not recur to me at my desk. That is as it should be; it is only a master like Huxley, who may write fine and brief papers on an all-embracing subject. My subject embraced man, the relations of the physician to him, and wherein the physician falls short of his duty to man, and to the polity in which he practices his profession.

As mentioned beforehand, my remarks upon the education of the physician were enlarged upon by Dr. Billings at New Orleans. He touched exclusively upon that education which constitutes the equipment of the healer. I have sought to point out that the shortcomings of the physician of to-day, culminate in the fact, that the profession as a whole fails to grasp the great truth, that the healing art is but a part and a very small and insignificant part, of the great science: Anthropology. The physician as he should be, the ideal physician, the man who really could benefit mankind, must be, first and foremost, an anthropologist. Of most physicians I believe I may say—they fail to see their limitations. You claim to have decreased death rates,

when in fact that is beyond your power. You claim, that as public, or quasi public, functionaries (health officers and examining boards), you have and are benefitting society, when in fact you are but an additional burden. You claim to have entered a new era as scientists, that you now treat the patient, not as formerly, the disease. But, "Wo eben die Begriffe fehlen, a word steps promptly in as deputy." We give a guarded or unfavorable prognosis, or say: Our patient is seriously ill, whenever we apprehend the oncoming of indications not consonant with his longer stay on earth. The other indications, those which presage recovery, we meet right manfully; a fight not entirely Don Quixoteian, as we save our face, and earn (?) our fee. However, this new era of which you have so much to say in your addresses, is not so very new after all. The new truths were forced upon you after a struggle of quite two hundred years.

We hear so much about the stress and worry, the strenuous life, of our time. I hold that the proof is all the other way, and that we of to-day are living much slower, far less strenuous lives, than our forefathers. That we are in comparison mental and physical sloths, mere pampered voluptuaries. We are mentally wholly indifferent to stimuli which should rouse, and we are unfit for healthy physical reaction to these stimuli. We see public office filled with the most corrupt and venal creatures imaginable, and public moneys in untold millions converted to private ends. The strenuousity so much talked of, is only in evidence in the effort to get our finger in the public pie, and to keep it there. We make no effort to do away with these abuses, we are party to them. But the claim that you have entered upon a new era, is subject to question. You may be drifting toward a new era, but the drifting is done upon a trackless waste, and the self-authorized leaders, as well as the rank and file, are without compass or chart. The proof lies in this, that you obstinately reject the main truths contained in the new thought. You persist in acting upon the principle that you may lend your aid indirectly to increase the price of bread, and yet be benefactors of the race. As a class you are no exception to the mass of humanity upon whom you presume to work. For you, as for them, the world is "ein Wirrwarr der Vorstellungen und Verhältnisse." If that is not so, how comes it that, with you as with them, it holds good, "that the belief in the efficacy of legal enactments springs eternal in the human breast."

Specific replies to criticism are generally but explanations of meanings. Always excepting, where criticism is an express denial of a specific historical citation, or statement of fact. The whole burden of my paper is, after all, but an enlargement of the often expressed

view "that the order of nature may not be disturbed." A people, a government, organizations and institutions within that government or polity, are all subject to immutable law. The only thing or phenomena, outside of nature, or subject to a large extent to human interference, is the ethical process.

The songs of a people, their poetry, their art in its entirety, their traditions and customs, are but the results of innumerable factors that have been active in times long antecedent to the period now open to your observation. These customs and arts, these human interpretations of the past soul life of the people, again react upon their avocations and their mode of thought, and these in their turn, determine the future institutions, which are to have a stable growth among them.

Discussion.

DR. ELMERGREEN, Milwaukee—I hardly feel competent to discuss this paper. I tried to take notes but was so carried away by the essayist's reason and rhetoric that I even failed in this.

While I compliment Dr. Fuchs on this great effort, I also wish to commend the paper to all of you for sober reflection. It seems, after all, that our thinkers dwell in the smaller towns. The long and only too often lonesome professional trips, on wide-horizon stretches, taken in the clear invigorating air, apparently are conducive to thought— thought that finds expression in such out-bursts as we have just listened to. Strip the paper of its rhetoric, and you find that the essayist sounds a higher note of duty than our courage is attuned to, and it might be profitable for all of us to follow his major premises to logical conclusions. Papers of this type unfortunately invite a good deal of adverse criticism. Most of us love the well-trodden paths—love to follow foot-prints, in other words—are conservatives, and share a common horror for all iconoclastic tendencies. Still, in every word utttered by the doctor you find the thoughtful man. It is the crank after all that revolves the world. Think for yourself. It is a regrettable fact that we are only too prone to adopt the thoughts of others as our own. Our leaders—and leaders only too often by virtue of their social or professional standing and pretended superior mechanical skill—lay down statements and ninety out of every hundred of us follow blindly. Still it does not necessarily follow that because a man is well known in any of the departments of art or science that he is therefore necessarily a great student. Not at all. The blunt, elastic conscience often is a greater factor in the evolution of the surgeon than is scholarship and mechanical skill. Of course, I would not go to the extreme with the essayist who holds that every statement read in the medical journals should be adversely criticised, claiming as he does, that you will be right ninety-five times out of every hundred times by doing so.

But still I maintain that we are far too much in the habit of adopting thoughts, grinding the old ruts, becoming indifferent, passively following in the wake of our tin-gods. Consider nobody your superior in the capacity for dynamic thought.

There is another point the doctor touched upon very casually, and that

is the relation of the physician to the state. The essayist was not quite true to his title here. He should have enlarged on this phase of his paper at greater length

That the doctor ignorantly nurses notorious shortcomings in his relation to the state, we all know. That he even prides himself on these shortcomings the more observing of us will readily admit.

And I wish to state right here, that I endorse the generous criticism accorded the moss-back of a physician by the able essayist, so far as he went.

I have often wondered why the physician should be asked to subordinate his citizenship to his profession. That he is asked to do so can hardly be gainsaid. Look at our foremost doctors in any of the largest cities. Where do they stand in state and national economy? What privileges do they exercise; what influences yield? Not any. Even in sanitary, hygienic and medico-legal questions their work is wholly advisory, never dynamic. Why, the majority of physicians do not even exercise their privilege of ballot sovereignty except on general elections; and not one doctor in ten knows what a preliminary is. While the doctor hides himself in his office and props up his dignity by exclusiveness and absurd indifference to the science of government, he finds himself represented in county board, common council, the halls of state legislation, or even Congress by some illiterate neighbor, a lawyer or a saloon-keeper.

And when the election is over and some important medical or sanitary measure is voted down, the doctor who had neither time nor inclination to vote, childlikely curls his lip and says "What can you expect of the government anyhow?" No, he never stops to think "that government" means himself —that it was his own passivity that permitted this.

Roosevelt warns us in his "American Ideals" that the man who thinks himself too good and too clean to mix with the crowd and influence the preliminary vote has a wrong conception of the duties and obligations of American citizenship. There is no reason in the world why the lawyer, who knows little or nothing about the many sanitary and social questions involved in a community, should consider himself nearer to the people, and more entitled to their suffrage and support than the doctor is.

There are some good reasons why state affairs and medicine should not be divorced. The doctors in France and Germany constitute a political power. Virchow was as great a statesman as he was a scientist. The same is true of Ricord and Koch.

It were time that the American doctor mingle with the common herd, seize his ballot, and make his influence felt.

To what absurdity the medical profession will turn sometimes has only lately been manifested by the writings of our critical friend, George M. Gould, editor of *American Medicine*. Now no man stands higher in ethical medicine than does Dr. Gould, still this gentleman deliberately counsels the political boycotting of all men opposed to certain medical legislation. "Vote for the other man," he says. But the other man may hold views on economic, industrial or sanitary measures directly opposed to your views. Still vote for the other man, says Dr. Gould.

How absurd to hold the law of retribution, or the sanctity of some questionable medical measure as co-ordinate to the thousand and one economic

and industrial questions that daily arise. No, gentlemen, go to the polls and vote as citizens, not as doctors. It is far more important to a community and to yourself to be a good citizen than it is to be a good doctor. Why not be both?

DR. HERMAN GASSER, Platteville—I had no intention whatever of discussing this paper. I feel that I am incompetent to do so, as it ranges out into almost every form of knowledge, is so broad in its scope and generally just and true in its conception, for it is still true the dollar mark is so high a standard of measure and potency that it almost amounts to weakness. That, however, is not wholly to be regretted, as it is a natural expression of our youth, vigor and prosperity that is full of promise for the future. It is no mistake that there is a steady stream of American students to the foreign seats of learning. It takes time to build up an educational system upon a sound and well organized foundation of meritorious and real worth. When he states that nearly all our scholarship, nearly all our learning, nearly all our professorships, receive the beginning and end of all scientific instruction from Germany, Austria or France, that was probably true twenty-five years ago, but it is becoming less true each year, and the change is going on very rapidly at present, so that it will not be a great while before students will be coming from foreign lands to our own country to learn the new civilization and culture, the tide of which is already observed in the special departments of commercialism and agriculture with its new sociology, wherein they are already far behind. While we have indeed many things yet to learn from our foreign neighbors, we are learning them so fast that there is no more doubt as to where the great seats of science, education and world-renowned universities will be found, than there is of our own existence. Nowhere on the earth is the physical and economical general life and welfare so complete as it is in the United States of America today. This is what an editorial in the Tribune of yesterday meant when it said that the Americans suffered more from nostalgia or homesickness in the Philippines than any other nationalities, because they have so much to live for in the United States of America, and that is why when they get so far away from home, with that enervating climate away out in the Philippines, they begin to think of what they have left, the luxuries and the wonderful resources of the country in which they have been reared, and want to get back to their parents, to their homes, among their friends, where they have the highest, the best and the greatest civilization that ever existed upon God's earth up to the present time.

DR. FUCHS (closing)—I wish to pass a compliment to Dr. Elmergreen for his remarks. He seems to have entered into the spirit of the paper. I am not disparaging the efforts made, and extolling Germany. You persist in failing to see that improvement must come from within. I am not criticising the United States at all. I stated specifically you did the best you could. I want you to stop going to Germany, I want you to make American medicine. That is the point. You are taking it today from Germany. All your research is done there; your books are made there; you are taking away the dross and leaving the gold. Their institutions are noble because they are democracies, the purest democracies in the world. There is no graft there, there is no nepotism there. There are no favorites except the men who have the

brains. None others need apply. No grafters or boodlers need come there. No Bismarcks can do anything in those universities. He tried it— he placed a professor in a chair, but the professor was ignored. He has gone to that oblivion where he should have gone long before his appointment. But here things are entirely different; it is graft all over. Why? Well, God be praised we have at least shown up Missouri, and the democrats have there wiped away part of the iniquity in their ranks, and in Minnesota the Republicans have there wiped away part of the iniquity. But what about Pennsylvania? (Laughter). Such things in any other country would be absolutely impossible. Talk about free institutions or any man being free in Pennsylvania—it is out of the question—you are simply the servant of the servants of Boss Quay.

I hope, gentlemen, that you will struggle eternally to make your institutions something nobler than they are at present. Gentlemen, try!

THE REMOTE SEQUELAE OF ADENOIDS.*

BY C. D. CONKEY, M. D.,

WEST SUPERIOR.

For many years the subject of adenoids has received much attention at the hands of the medical profession, and in presenting a paper upon this much discussed subject I am aware of the danger of treading upon well beaten paths. However, as far as I know the literature has been concerned entirely with the immediate effects of the disease, and only incidentally have the remoter sequences of adenoids been discussed. The object of this paper is to deal with these remoter sequences, the heritage left to the system by the disease and remaining long after the adenoids have disappeared from the throat.

The sequelæ of adenoids are numerous. Some are transient; others become a part of our very frame-work and never cease to exist. As a rule, after the age of puberty adenoids undergo a shrinking process, and if small often cease to give further annoyance. In many cases they entirely pass away at this age. In others the resulting contraction leaves only an insignificant mass. A certain percentage, variously estimated from five to fifteen per cent., retain their relative size well up into middle life. Broadly speaking, the disease is a disease of childhood and has passed away before the child passes into young manhood or womanhood.

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 3, 1903.

With the disappearance of adenoids it is far from true that there is a corresponding improvement in the condition produced by them. It is a common occurrence to observe persons presenting all the characteristic symptoms of adenoids where all traces of the disease have passed away. I have many times examined such persons with such a result. Years had elapsed since the disappearance of the adenoids but the deformity developed during the activity of the disease was as marked now as then. In estimating the effect of adenoids upon the system, this far reaching effect should never be lost from sight. A chronic or incurable condition entering into the prognosis greatly enhances the gravity of the disease.

The most marked sequela of adenoids is deformity of the cranial bones and the soft parts covering them. The closure of the nasal cavities for a series of years at a period when the bones entering into the formation of the face are undergoing a steady change, and laterly a very rapid change, has a profound effect upon their ultimate shape. The usual picture presented by the adenoid victim is that of a wide-opened mouth, thickened lips, broad nasal arch with narrow alæ nasi. He usually has a high palatal arch, a shortened upper jaw, and an overhanging lower jaw. The facial appearance is characteristic. Now this same facial stamp goes in many cases with the patient through life. If nasal respiration is wholly or partially re-established, the deformity improves to the extent that the nasal cavities are brought into use. If nasal respiration is not restored, the same marked characteristic features will be found existing twelve or twenty years afterward. One accustomed to study faces can pick them out of the crowd of passers-by at any time. These deformities are contracted at an early age. The long period of non-use of the nasal chambers results in an imperfect development. The period of life at which adenoids disappear is the period when the nasal, as well as all the facial bones are expanding rapidly. Conditions at this period should be favorable for the removal of the contracted nasal calibre, but unfortunately they often fail to expand. The reason of this is plain. The habit of mouth breathing has been firmly established. This habit is seldom overcome entirely. Nasal respiration may have been partially restored, but for the sleeping hours at least, the mouth drops wide open and nasal respiration ceases. The contracted nasal cavities are no longer sufficiently roomy to supply the person with a sufficient amount of air without forced respiration, and when the effort to breathe is overcome by loss of consciousness, the lower jaw relaxes and the breathing ceases to be nasal.

Pathologists tell us that an organ when not in use ceases to

develop. There is certainly an arrested development in the facial bones of many of these cases, producing the picture just mentioned. In a much larger class where adenoids are present, but not resulting in complete closure of the nasal passages, the decided change in the physiognomy is not so marked. However, the nasal passages are narrowed in these cases in the proportion that they are restricted to their use. There is a very large percentage of children who are slightly troubled with this affection. During waking hours they breathe through the nose but as soon as they fall asleep they become mouth breathers. Later the adenoids pass away, but they still continue night mouth breathers with all the accompanying discomforts that breathing a cold, impure air inflicts.

I was greatly interested in reading an article by Dr. Stewart Tufts in *American Medicine,* upon the treatment of mouth breathers at night. In this article Dr. Tufts states that he has been carrying on a series of investigations as to the frequency of night mouth breathing. As a result of his investigation he finds that 70 per cent. of those examined breathed through their mouth at night. These figures are very surprising, but who is able to confute them? It is a habit that is extensively practised, though these are the first investigations that ever came to my notice upon the subject. In this article the writer does not deal with causes, but to one who has studied the effect of an increased amount of tonsillar tissue in the vault, either before or after its disappearance, the belief grows upon him that a very large percentage of these mouth breathers at night are caused either by the abnormal tissue itself or by the habit produced by it.

The symptoms produced by mouth breathers, even during the sleeping hours, are decided. Many of these people are troubled by hypertrophic catarrh. The non-use of the nose for several hours every night causes a congestion of the membrane which readily passes into a chronic inflammatory condition. Our efforts to cure it are met with defeat, as by the non-use each night the good effect gained through treatment during the waking hours is lost. In order to have a healthy nose it must be used all the time. In the treatment of chronic nasal disease we have learned that the first requisite is a free nasal passage. Without first obtaining it we cannot benefit our patients. If one or both sides are obstructed we find a disturbed circulation or active inflammation. In these night mouth breathers we encounter a parallel state, and in them we meet the same circulatory disturbance. This is only one of the effects of this night mouth breathing. The inspired air, neither properly warmed nor purified, is carried down through the respiratory tract into the lungs, causing the throat to become dry

and congested, and no doubt making the larynx, bronchi, and lungs more susceptible to inflammatory attacks, if not directly provocative of them.

Another condition following the disappearance of adenoids is post-nasal catarrh. This trouble is likewise to a certain extent dependent upon an improper nasal respiration. This trouble usually develops while the adenoids are still present, but persists long after their disappearance. If for any reason continuous nasal respiration is not secured, this disease will continue.

Probably no organ in the whole body suffers from adenoids as do the ears. It has been estimated that 90 per cent. of non-suppurative catarrhal diseases of the ear in childhood are caused by this disease. Many of these cases become chronic before the adenoids disappear. Suppurative disease is also largely dependent upon this cause. With the disappearance of the adenoids the faulty conditions remain. A proper aeration of the ears is absolutely necessary for the preservation of their health. When adenoids are present this requirement is very frequently interfered with, and after their disappearance the improper direction of the current of the air passing through the mouth instead of through the nose, still exists, and there is a failure to secure the desired improvement in the hearing organ that the disappearance of the adenoids would lead us to hope for.

To recapitulate: (1) Nature often fails to bring relief to the organs of the body unduly influenced by the presence of adenoids, by the shrinking process which takes place about the age of puberty. (2) The facial bones are arrested in their development giving a characteristic appearance to the facial expression which is very far from the beautiful. (3) The nasal cavities are narrowed by long years of non-use and are frequently distorted by the development of a high palatal arch encroaching upon their calibre. (4) The habit of mouth breathing is acquired especially at night which acts deleteriously upon the ears and upon the respiratory organs. (5) Chronic post-nasal catarrh is a frequent accompaniment of adenoids and persists after their disappearance.

With these facts before us there is but one course of treatment to pursue, and that is the early and thorough removal of these growths. This applies to that very large class of children who are suffering from a moderate quantity of lymphatic tissues in the vault, as well as to the limited number who suffer from complete nasal obstruction. When complete nasal obstruction exists there is more likelihood of relief being sought at the hands of the surgeon from the very severity of the symptoms, but even among them there are a large number that are allowed to go unaided, either through the negligence of the patients or

through the prejudice of the acting physician, or to the return of the growth.

The operation for adenoids has fallen somewhat into disfavor from the fact that there is a tendency to a return of the growth in some cases. This tendency has been greatly exaggerated, for the percentage of return is small and grows less with each year added to the patients' age. In an experience with these cases covering a period of thirteen years, I have found it necessary to remove these growths three times in not more than three different children, and possibly a dozen times I have found it necessary to perform the operation a second time. For all others a single operation sufficed to thoroughly eradicate the tissue for all time.

After their removal our duty is not entirely complete. We should insist that the little ones are brought back for inspection from time to time, so that if there is any return of the growth it can be promptly removed. We must also remember that even in those cases of only a limited duration, certain constitutional conditions have arisen that need our care. Usually there has developed a post-nasal catarrh that requires persistent cleansing before it disappears. Already the mouth breathing habit has been acquired which should now be overcome. This can often be done by making a strong mental impression upon the child. Insisting that they sleep with the mouth closed may be all that is necessary in many cases. There are a number of devices to overcome this habit, such as splints, rubber mouthpieces, etc. Dr. Tufts highly praises the application of thin court plaster to the lips upon retiring. In mouth breathing there is a relaxation of the muscles of the lower jaw. The slight support given to it by the plaster will be sufficient to hold it up, and in a little time the mouth will cease to drop open. In that class of cases where there has been a decided arrest in the development of the nasal cavities, there is at first not sufficient nasal space to allow of complete nasal respiration. In these cases all irregularities and hypertrophies must be removed before instituting measures to correct the trouble. It will be found that there will be a lessening of the turgescence of the turbinates by compelling these people to breathe through the nose. At first the effort will be great, but if persisted in there will be acquired an increased capacity and, to a certain extent, the trouble will be overcome.

Discussion.

DR. H. B. HITZ, Milwaukee—As to the deleterious effects of unremoved adenoids, I think most of us can testify. Those of us who are treating this class of cases, find a large number of them that come later on for treatment of nasal catarrh, which can unquestionably be traced directly to unremoved

adenoids in earlier years. These cases of catarrhal trouble are frequently of a septic character. The very narrowing, due to this obstruction and the non-use of the nasal spaces, to a certain extent have contracted the auxiliary sinuses, and in consequence, their drainage is, as a rule, insufficient. The result of this is the tendency to septic disease, and it is not an infrequent thing to find that the patient, upon close questioning, gives a history of having suffered with nasal obstruction in earlier years undoubtedly of an adenoid character. Together with this we usually find the high arch palate that Dr. Conkey has spoken of, and injury to the teeth.

As a remote sequela of adenoids, or preferably nasal obstruction, in earlier years, we frequently find deformity in the chest; deformity that is not corrected to any great extent as age advances. Occasionally after adenoids have been removed, perhaps at the age of 10 or 12 years, and the child is put through systematic gymnastic exercise, improvement does occur, though often-times the "chicken breast" and flattened chest remain throughout life.

There can be no question as to the value of early recognition and removal.

The error I think that many physicians fall into is in diagnosing adenoids without sufficient examination. I frequently have cases referred to me for removal of adenoids, and when I make an examination I find that there are no adenoids—that the obstruction is in the nose and not in the post-nasal cavity. It is an error that should not occur, because the diagnosis of adenoids is not a difficult thing, either by the use of the mirror or by digital examination. Of course digital examination is rather a severe procedure, but if one is reasonably gentle with the child, it is over in an instant.

As to recurrence: if properly removed in the outset it is extremely rare. I think that cases of recurrence are usually those that have been operated upon without an anesthetic. Of course there are times when it is advisable and preferable to remove adenoids without an anesthetic, but at the same time it is a means that cannot be absolutely relied upon for securing the entire obstructing mass. This is particularly so when there is a tendency of a certain part of the growth to force its way into the posterior choanæ of the nose. In these cases, in operating without an anesthetic, we usually find that we have left a mass, and have to get it out at some future time, or the case drifts into the hands of one of our competitors who may say the operation was not properly done, and who shows that this is the case by finally removing the mass. This can easily be overcome by the use of an anesthetic, and I am more and more getting to favor the use of some general anesthetic, preferring of course, chloroform, administered to a very limited extent. It is surprising how rapidly this operation can be done and how little chloroform is usually required.

The instruments generally used are the ordinary ring knife, or the Gottstein curette, and some sort of post-nasal or adenoid forceps, such as Loewenbach's or Urbantschuetz's.

As to the results: I do not know of anything in the whole range of medicine that gives such permanent and excellent results as in those cases where the obstruction is of a severe character. The general condition of the child is not dependent upon the presence of adenoids, it is dependent in my judgment, upon the obstruction to respiration, the difficulty of getting sufficient oxygen. Of course some of them very early acquire the mouth-breathing habit,

but others do not, and necessarily the moment the obstructing mass is removed, free nasal respiration is resumed. Every one who has had experience with these cases, recognizes the astonishing rapidity with which the little victim recovers a vigorous, normal health.

Dr. Conkey's suggestion of it being a good idea to keep track of cases, is one that I can heartily endorse. Frequently we dismiss these cases as cured, but once in a while we find that a little additional attention is the means of saving the child considerable deformity and also saving the case from the necessity of another operation. Only last week I had a case of this kind which was operated upon two years ago, and, I believe, thoroughly, by a friend of mine. Recently it drifted into my hands and I found quite a large mass of adenoids. The child showed not only the typical facies of adenoids, but had this winter suffered from three or four attacks of earache, and one ear went on to suppuration. This case was operated upon several days ago and quite a large mass of adenoids was removed. If this had been kept under observation subsequent to the time of operation, probably the trouble would not have recurred.

One more observation, and that is as to the ear disease that so frequently occurs in cases of untreated nasal obstruction, principally of the adenoid variety. There is no doubt in my mind but that a large number of cases ultimately becoming chronic, such as catarrhal deafness of practically an incurable variety, are due to the result of adenoid obstruction in early life. We frequently find cases where the parents, for one reason or another, object to the removal of the growth, with the result that acute ear attacks are frequent. Perhaps it is only a slight condition of deafness, or it may be one of severe suppuration. In all these cases a path is formed, which by frequent recurrences becomes a beaten path, and every pathological condition that occurs subsequently in the head and throat, seems to travel along this beaten path and inevitably leaves its quota of trouble behind.

DR. CONKEY (closes)—The object of this paper was to point out the frequency of imperfect nasal respiration. A vast number of people breathe imperfectly, producing the serious results described. In my paper I simply mentioned those that are related to the nasal cavities, but there are a host of other conditions that are brought on by imperfect breathing, that is, breathing through the mouth instead of through the nose. I do not think that we as physicians have paid sufficient attention to faulty methods of breathing. Certain failures in the treatment of respiratory troubles can be traced to the neglect of the physician to inquire into the mouth-breathing habit, and the failure to correct the same.

I might mention some other conditions, such as stammering. I noticed a statement recently that there were 300,000 stammerers in the United States alone. Now it is a well known fact that stammering is a disease produced largely by nasal obstruction. Consumption and other diseases are produced by the same causes. Breathing through the mouth impure cold air not properly moistened by passing through the nasal cavities, has a tendency to bring about a diseased condition.

INDIGESTION—A FEW OF ITS CAUSES AND A FEW OF ITS EFFECTS.*

BY H. B. SEARS, M. D.,
BEAVER DAM, WIS.

When food products taken into the alimentary canal are not transformed by a process of hydration or solution, enabling them to be absorbed by the blood vessels or lacteals, they are said not to digest or that a state of indigestion exists. So closely related and mutually dependent are the various steps in nutrition, that one step in the process can hardly be discussed without referring to, or considering, the others. Digestion, absorption, assimilation, disassimilation and elimination form the path or circle of nutrition, any one process in which being at fault, represents the weak link in the chain, indicating the strength or capacity of the case under consideration.

Pawlow's very interesting and valuable investigations seem to warrant us in emphasizing as all important, every step in the digestive process; not even psychic influences are to be left out of our calculations. The perfection of each step in the process, he affirms, is essential, not only for what is really accomplished, but also for its effect upon the process which immediately follows. Therefore we are only justified in the effort to obtain uniform functional activity, not ignoring the simplest of nature's processes, nor forgetting that the sum total of individual force or capacity is measured, very often, by the weakest part. The perfect or ideal human mechanism must needs ever be in our minds, as well as appreciation of the necessity of well adopted laws for its government or control, also influence of environment. Violation of law and faulty environment will yield innumerable inferior capacities which will need our special attention, ingenuity and best judgment, to detect their respective weaknesses and adapt rules of living whereby a higher standard of nutrition may be established and individual usefulness and comfort increased.

The one important fact of divers capacities, each representing special needs and liabilities to suffer from injudicious rules of living, should never be allowed to absent itself from our minds. Nature tries hard to adapt herself to unfavorable conditions, but this is no reason we should not help her in the struggle when we can. The need of detecting digestive disturbances early, before the remote effects obtain,

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 3, 1903.

is too self-evident for comment. Much in this line is very hard to get at, as we are not to blame for not giving advice when it is not asked, and many times when we give it, it is not followed. We may at times be accused of self-interest, but I believe the results will warrant the effort, and that the time has arrived when the family physician has a duty, as well as a sacrifice to make, along the line of teaching and exhorting hygienic living. Perfect digestion, I believe, is seldom seen by us in practice. Do not believe that one in ten is possessed of such. Some may think I am putting it too strong, but my experience and observation justify the statement. This defect in functional activity has its effect upon the economy both immediate and remote. Around the family table they gather, from the two-year-old to the tottering grand parents, and each and all are helped from the various dishes regardless of adaptation or digestive capacity. Is it at all strange that many should suffer? The stronger in digestive capacity tell the weaker that nothing ever hurts them, and that if they would be likewise strong and hardy, they must follow their example. Thus, the survival of the stronger encourages the weaker to persevere in the effort to perform that which their more vigorous companions achieve without apparent injury. This effort to become vigorous by encountering difficulties, regardless of capacity to withstand the same, is productive of strain and injury rather than strength. One of the distinguishing characteristics of this age is *haste,* and it had better be practiced anywhere than at the table.

Of all the causes of indigestion this is the worst and most common. Fast eating is a great fault of all classes. The time for meals is limited and many feel that they must eat fast in order to put in a sufficient store of energy and fuel for the half day which is before them.

Fast eating is always, of necessity, accompanied by poor mastication. The food is bolted and of course is digested with greater difficulty. To assist, both in time and ease with which the mouthfuls are transported to the stomach, abundant liquids are usually taken. The trio are sufficient, with time, to disturb or overtax the best of digestive organs. Poor teeth or no teeth at all, are causes that may operate like the preceding, although the conditions are very different. Such should eat no meat nor articles requiring much mastication. Indigestion of this kind will improve but slightly until artificial teeth are provided or imperfect ones extracted or repaired. Some of the common cereal foods are universally undercooked. Oatmeal should be cooked two hours at least, cornmeal is hardly digestible with less than three hours cooking and rice needs as much or more. Beans, a very common article

of diet, need ten hours boiling followed by five hours in the oven. Whether from lowered digestive capacity or unsuitableness of quality or of preparation, my observation has emphasized to me the frequent difficult digestibility and irritating effects of meats. Fried meats are generally overcooked and are very hard to digest. Fresh meats are more productive of irritation, if not perfectly digested than are those which are salted or smoked; probably, because, if not digested, the cured meats are less liable to fermentation or decomposition. Fresh veal and pork of all meats are most likely not to digest and are most productive of irritation and intoxication. Children under ten years of age, I believe, are better off without, than with meats. Meats require thorough mastication in order to be digested and very few children can be relied upon to do this. The digestion of imperfectly masticated is, too often, superimposed upon an already weak and sensitive stomach. Nature will often make effort to get rid of this by emesis or purging, indicating to those in charge, as well as she can, the unsuitableness of such food. It is also very common for the parents to be anxious and determined to place the young child, of a year or more, upon various solid foods regardless of its ability to digest. It is very easy thus to entice a child away from its natural and proper nourishment and lay the foundation for future digestive weakness. With children, a craving for meats is soon developed, which, only too often, is satisfied at the expense of a dietary more suitable. This, I believe, is a most vicious state of affairs and is sure to end in disaster. Very often an irritable condition of the whole alimentary tract is thus established and mal-nutrition and intoxication become evident. The prevailing idea that one cannot be strong and have endurance without meat, is, I believe, erroneous. This one impression, and the disposition to put it into practice, it seems to me, is more productive of digestive disturbance and its resultant bad effects, than any other single cause. The food that *digests,* is the food that counts, not only for strength and resistance, but also for health and safety.

The ill effects of indigestion are immediate and remote. The immediate effects may be mild or severe in type according to the sensitiveness or reactive power of the individual, the severity of the irritation or the profoundness of the intoxication. Nature usually makes prompt effort to expel from the human organism all offending substances and immediately sets about repairing injuries, but when she fails, signals are thrown out that we may come to her assistance. Expressions of discomfort or distress or any deviation from the normal in function, invite us to discover the cause of the disturbance and to lend a hand in the prompt removal of the same, together with aid

in the restoration of function. A single offense is often of very little moment, but a frequent repetition of the same would hardly be allowed or encouraged by the thoughtful. The reaction which comes with ideal vigor and resistance may at last tire, and a crippled and defenseless mechanism take the place of that which was thought invulnerable. The ingestion of improper food or that which is not adapted to the individual, may soon find expression in localized disturbance such as pain or nausea followed by emesis or purging, nature's means of getting rid of offending material, of shortening the disturbance and saving the economy. The more promptly this occurs the less will be the local irritation or injury as well as the systemic disturbance. In infancy and childhood, owing to the sensitiveness or susceptibility of the nervous system, the shock is often profound. In all of these cases, either acute or chronic, there are two effects which should not escape our attention, namely: local irritation or inflammation and systemic disturbance or intoxication. The stomach, being the first receptacle, is where the warfare begins; and the length of the struggle will usually decide the damage to the stomach and the co-operating organs as well as to the system at large. From the stomach irritation or inflammation may extend through the pylorus to the duodenum, up the bile and pancreatic ducts, and down the intestines, not failing to give the appendix and large intestines their proper share in the trouble. We touch lightly upon these points now, not because they are unimportant, but because we wish to pass to the second effect of indigestion, namely: auto-intoxication.

Bouchard stirred the whole medical world by his discussions on auto-intoxication. None, I presume, will question the truth of his conclusions. However, much that he has written seems to have been forgotten. While admitting auto-intoxication in fact, many fail to recognize that it may be minimized by suitable dietary and more attention to nutrition in its broadest sense. The facts seem to be, that the food not digested is transformed by a process of fermentation or decomposition into toxic substances, which are absorbed, enter the circulation, and are carried to the tissues, where, after a time, they modify the functions of organs as well as the functions of cells. The resisting forces of the organism, liver, kidneys, lymphatics and corpuscles, may at first resist the onset of these products, destroying and casting them out. However, against such odds, they cannot forever be successful. Gradually through the persistance of these poisons the resistance grows less, until at last we may expect structural changes as well as that of function. In support of this I quote from Keating's Encyclopedia of Diseases of Children as follows: "The degree of

cellular alteration is dependent upon the two factors of intensity and duration in the exhibition of the poison." Again:—"The degree of the degeneration will, of course, vary in relation to the virulence or the time of action of the given poison, but its character will be invariably the same." If the foregoing is true, as we believe it is, indigestion is the occasion furnishing the products, which by transformation, yield poisons, which, through their long persistence may bring about the same results as occur in diphtheria, scarlet fever, typhoid fever, etc., also hyperplasias as found in cirrhosis of the liver. For the above we find confirmation in the American Text-Book of Pathology (754). While ready to admit that these changes may be produced or furthered by micro-organisms, I wish to affirm that it is not necessary. Micro-organisms may be present in the healthy human organism but they may be destroyed or rendered inert by the tissues, unless the vitality of the cells is lowered. This is also supported by the above mentioned work on Pathology.

Continuing:—If the more virulent poisons produce degenerative changes in the tissues, then may the auto-toxic poisons, by long continuance, do the same, or, by lowering the resistance of the cells, prepare the way for any diseased process. Poisons, we understand, may act as irritants, which at first produce increased activity of the cells, but eventually may exhaust their responsiveness or even destroy them.

In auto-intoxication, then, we may have all degrees of digestive incapacity with overburdened emunctories, which are laboring hard not only to rid the system of normal tissue metabolism, but also the toxic products of intestinal fermentation. It does not require a very vivid imagination to see the susceptibility or liability of any part of such an organism to disease. What part of the economy will be the vulnerable one will depend largely upon predisposing weaknesses or the exciting causes. This condition of the system encourages exaggerated or vicarious functional action, in which first one part and then another participates, as the drift of toxic products decides. Secretion and excretion may be either inhibited or increased; in fact any modification of function may occur. We have here the favorable condition which only needs the exciting cause, as an exposure or a specific germ, to initiate an active process. As examples of this state we have involvement of the various systems of the body as predisposition may encourage. Of the skin we have dermatitis, eczema, acne, urticaria, etc. In the respiratory system we have nasopharyngeal catarrh, asthma, and bronchitis; in the alimentary canal we may have excitation or inhibition of function together with pathological changes, in addition to the initiatory disturbances which were the first causes of this general condition. Not

only functional but pathological changes in liver and pancreas, conditions favorable to the formation of calculi, colitis, appendicitis, proctitis, etc. In the cardio-vascular system we may have changes in the endo- and myo-cardium, endarteritis, phlebitis, atheroma, etc. In the nervous system, inflammatory and degenerative changes, neuritis, meningitis, sclerosis, epilepsy. In the articular system, the so-called rheumatic affections which are but the drift of toxic products to the joints. This, however, is the factor in the lowering of the resistance of the joints, making it very easy to engraft tubercular, gonorrheal or septic synovitis when occasion offers. In the urinary system with its increase of duty, catarrh, calculus formations and interstitial changes as well as those of the parenchyma.

Finally:—Indigestion, resulting in auto-intoxication, may be the deciding factor in many or all diseases, holding the balance of power which decides life or death. It is the condition which under the name of cold, grippe or biliousness, keeps the patient for the doctor's profit. It is the unknown quantity in many a personal equation: It is the condition, wherein an active process, in one part of the body, as upon the skin or in the alimentary canal may be transposed to the meninges or the lungs. It is the one condition for which ideal living is quite as essential as medicine.

COUGH IN INFLUENZA SIMULATING WHOOPING COUGH. PSEUDO PERTUSSIS.*

BY ARTHUR J. PATEK, A. B., M. D.,
MILWAUKEE.

The meager reference in the literature on influenza to this form of paroxysmal cough, may justify my presenting the matter to you.

While not wishing to lay too much stress upon a single symptom in the diagnosis of a disease, and more particularly a disease of such protean character as is influenza, nevertheless there is one feature to which—because of its stubborn pertinacity and the futility of varied forms of treatment—the physician's attention is attracted, that is the cough of influenza. Doubtless all of us have found ourselves disgusted with medicines, disappointed with local applications, and have deserv-

*Read before the Medical Society of Milwaukee County, May 15, 1903.

edly called down upon our heads the displeasure of a patient and his relatives because of the distressing and persistent cough that defied our best efforts. Did we but find a tangible cause in prominent or even slight local signs, the humiliation would not be so keen, but to have to confess to a patient that a hard, distressing cough is without an apparent cause save the inherent remains of a disease that was, is unsatisfactory to the patient and attendants, and often proves a reflection upon us and our best intentions.

Were we to judge from the writings of some of our *similia similibus* confrères, the character of the coughs of influenzal and other catarrhal affections would be numbered certainly in three figures, and, as they are varied, so would be the indications for combatting them. For the sake of brevity I will say that in influenza various coughs are clinically found: the dry irritation cough that is non-productive and the source of which the patient locates in the larynx; the harder bronchial cough with profuse expectoration; a dry bronchial cough characterized by its paroxysmal nature, and the futility of the extreme efforts to dislodge something, the only reward for the exertion undergone being the expectoration of a little tenacious sero-fibrinous mucous; lastly, a cough that forms the title of this report, resembling the paroxysms of pertussis so closely that a diagnosis is frequently very difficult, though not impossible; it is this cough to which has been given the name "pseudo-pertussis." In none of the text-books to which I have had access have I found any reference to this complication of influenza, and the only information obtainable comes from an article in the Archives of Pediatrics (June, 1900) by Forchheimer, of Cincinnati. Forchheimer has found mention of a whooping-cough-like cough in influenza as far back as the year 1510, but an Italian, Guidi, first called attention to it at length in 1892, and gave to the condition the name pseudo-pertussis. At a meeting of the American Pediatric Association in 1895 Holt mentioned a cough simulating whooping cough, though in his text-book no such statement is found. With the exception of references by two Italians, following the article of Guidi, this exhausts all evidence to be found pertaining to the subject. Forchheimer states "that the French name 'coqueluche'—before Baillou described whooping cough in 1578, was the name that was given to influenza in France, and then applied to whooping cough," but, according to a statement in Ziemssen, this name had been variously used before being confined to whooping cough. Forchheimer noticed this pseudo-pertussis to move in epidemics, associated with the symptoms of influenza; there were fever, respiratory and gastro-intestinal disturbances. It is generally conceded that it is allotted to no

one's share to have more than one attack of pertussis, and Forchheimer deems himself fortunate to have observed "a family of children who had never had whooping cough, but who became affected with whooping-cough-like cough, and after they had recovered were infected with true whooping cough which was brought to them by a visitor from another part of the country." Furthermore, several of his cases developed typical influenza pneumonia, in many there was persistent croup, in several edema of the glottis, and in three meningitis. These symptoms, as detailed, are quoted merely to call attention to the observations of one who has had large experience, and to prove that this symptom does exist as a clinical entity—an occasional complication of influenza, and not only the characteristic of true pertussis.

The two cases I have observed occurred during influenza epidemics, and their histories are briefly as follows:

Case 1. A child, aged 8. Illness began quite suddenly with fever, restlessness, prostration, and some irritation and pain in the throat. The temperature ranged between 100° and 103° F. Cough was present, not very distressing at first, but in a few days became paroxysmal and pertussis-like in character. These attacks were extremely frequent throughout the day and night; much thin phlegm was expectorated, and vomiting was associated with almost every seizure. During a period of almost two weeks no food was retained. In the third week of the illness I decided to send the patient out of doors —even though some fever persisted. Three days later the child was well.

Case 2 concerns a girl 13 years of age whom I saw in consultation several weeks ago. The question to be decided was whether we were dealing with a case of whooping cough or influenza. The history given me was to the effect that this patient had had the usual signs and symptoms of catarrhal influenza, and that several days after its onset a severe cough set in. This soon partook of a peculiar paroxysmal character, and may be described as follows: Without apparent warning a tickling of the pharynx is first experienced, followed by an inspiratory whoop, and then a period of abortive attempts at expiration, and practically a cessation of breathing during a period lasting from 10 to 15 seconds. A number of such seizures follow with, however, no distinct repetition of the whoop, and in about one minute the paroxysm subsides. Cyanosis is marked. During a period of about four weeks these spasmodic coughs persisted almost uninterruptedly. Tickling of the fauces would not precipitate an attack. Vomiting was incessant, and the patient lost much flesh. The temperature ranged between 99.5° and 101° F. Day and night these seizures continued. Under various therapeutic agents the cough gradually subsided, but after a two weeks' interval of comparative freedom from annoyance, the patient caught cold by driving in an open carriage, and in a few hours the same cough—ushered in by a whoop—

returned, with even greater violence and frequency than before. The therapeutic success was excellent in this relapse, nasal douches and the administration of heroin greatly reducing its severity in less than 24 hours. In about one week the pertussis character had entirely disappeared, a slight cough remaining some time longer. The temperature during this relapse was never higher than 101°, and but a few moist râles could at any time be heard in the chest.

The only question that needs any consideration is one of diagnosis. In a given case, then, as points in favor of a diagnosis of pseudo-pertussis of influenzal origin, as opposed to pertussis, one may note the existence of an epidemic, the sudden onset and presence of influenzal symptoms, the very early development of the whoop after the first catarrhal manifestations, the persistent fever and marked asthenia, the quick cessation of all catarrhal symptoms when the whoop has ceased.

I purposely refrain from mentioning the bacteriologic diagnosis, because, even where facilities are at hand, it has been found a difficult matter to discover the bacillus of influenza in the catarrhal discharges.

So much for the diagnostic side. As to the practical side of therapy, I may say that heroin internally, and glycothymoline nasal douches gave as brilliant a result as could have been wished for.

Open air treatment for Pulmonary Disease.— Dr. B. P. Anderson, of Colorado Springs, takes issue with the statement of Dr. L. F. Flick, of Philadelphia, to the effect that "outside air is good anywhere * * * even in cities outside air answers all practical purposes for the cure of consumption. * * * Mountain air is believed to have special qualities of value in the treatment of consumption. * * * These probably are more imaginative than real." Dr. Anderson says: "If we grant patients will do well in the out-of-door air of cities and in an eastern climate, is it not common sense and more reasonable to consider that speedier results will be obtained and more permanent recoveries ensue in a dry, *aseptic* air and in a climate flooded with sunshine, such as can be found in the Rocky Mountain Plateau, extending from Colorado to New Mexico and Arizona?

"The doctrine taught by a small portion of the medical profession, that open air in the large cities "answers all practical purposes in the cure of consumption" can be only disastrous to the consumptive invalid. No specific remedy having been found, the majority of the profession are agreed that a *suitable climate* is *the* one and only thing offering *recovery*."

WISCONSIN MEDICAL JOURNAL.

OFFICIAL ORGAN OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A Monthly Journal, published by the Wisconsin Medical Journal Publishing Co., and owned by and devoted to the interests of the Medical Profession of this State.

Original articles, Clinical notes, Correspondence, and Communications of interest to the Medical Profession are solicited. Reprints of articles contributed to this Journal will be furnished at cost price, but a number of copies of the Journal will be furnished contributors gratis. All manuscripts should be typewritten.

ARTHUR J. PATEK, A. B., M. D., Editor,
121 Wisconsin Street, Milwaukee.

Associate Editors.

CHAS. S. SHELDON, M. D., Madison.
HOYT E. DEARHOLT, M. D., Milwaukee.
OTTO H. FOERSTER, M. D., Milwaukee.
ALBERT W. MYERS, M. D., Milwaukee.

Collaborators:

Horace M. Brown, M. D.,	Milwaukee	U. O. B. Wingate, M. D.,	Milwaukee
Arthur J. Burgess, M. D.,	"	Chas. Zimmerman, M. D.,	"
Richard Dewey, M. D.,	"	Frank H. Edsall, M. D.,	Madison, Wis.
Louis Frank, M. D.,	"	W. E. Fairfield, M. D.,	Green Bay, "
Walter Kempster, M. D.,	"	Wm. E. Ground, M. D.,	W. Superior, "
William Mackie, M. D.,	"	Julius Noer, M. D.,	Stoughton, "
Solon Marks, M. D.,	"	Chas. W. Oviatt, M. D.,	Oshkosh, "
P. H. McGovern, M. D.,	"	L. H. Prince, M. D.,	Palmyra, "
Gilbert E. Seaman, M. D.,	"	H. Reineking, M. D.,	Milwaukee, "
Wm. H. Washburn, M. D.,	"	W. T. Sarles, M. D.,	Sparta, "

Annual Subscription, - - - $1.00. Single Copies, - - - - - $0.10.

Address all business communications to
M. M. TAYLOR, Business Manager,
709 Herman Bldg., Milwaukee, Wis.

CHICAGO OFFICE:
J. L. McKENNA, Commercial Nat. Bank Bldg.
175 Dearborn Street.

Vol. II. NOVEMBER, 1903. No. 6.

EDITORIAL COMMENT.

THE SMOKE EVIL.

A measure now pending before the Common Council of Milwaukee has in view the abatement of the smoke evil which so greatly inconvenienced this city during the past winter.

We sincerely hope that the Common Council may see fit to pass the ordinance, and so do away with one of the most annoying and unsightly features of a large city.

As this subject bears directly upon the health and welfare of the community it becomes the duty of the medical profession of Milwaukee to bring all its influence to bear in the passage of this measure.

Smoke is the result of imperfect combustion, and consists chiefly of watery vapor, carrying with it particles of unconsumed carbon. Smoke, therefore, means waste, and once thoroughly understood this will be the keynote of success in its abatement. The question of overcoming this evil is not so much one of law as of education.

The causes of dense smoke are two-fold—either the capacity of the furnaces is inadequate for the demands made upon them, and must be forced and crowded beyond their proper capacity to furnish the required amount of steam, or it may be caused through improper feeding of the furnaces by careless or ignorant firemen. In either case there is a ready remedy. Combustion is a chemical process, and to get good results it is necessary that a sufficient quantity of oxygen (air) be obtained to unite chemically with all the atoms of carbon and hydrogen; this accomplished, we have perfect combustion. Where, however, this result cannot be obtained by ordinary means, it becomes necessary that one of the many smoke consuming devices be introduced to accomplish the desired result. Although small particles of unconsumed carbon or coal dust do not *per se* cause disease, they can, however, by their chemical and physical properties, act as predisposing factors in a number of bronchial and pulmonary diseases.

All measures like this should have the full support of the medical profession.

SUICIDE BY CARBOLIC ACID POISONING.

Suicide by carbolic acid poisoning has become such a frequent crime of late, that it is time attention were called to this easily obtained means of terminating a weary existence. Almost daily we read of one or more deaths by carbolic acid, and were we to collect those reported in a single day's bulletin from various parts of the world, the total would be startling. Only recently some statistical figures went forth from Chicago, and the deaths from carbolic acid poisoning easily led all the rest. The popularization—through newspaper accounts—even of methods of inflicting death by one's own hand, has done much to encourage this crime, and when it is made known how few of these cases recover, the knowledge thus gained, does good service to a morbid mind; some day, when despondency and despair have routed any remaining traces of manhood, and life's battle has been fought and lost, the first, surest and most easily obtained remedy is sought, and it seems that carbolic acid answers these requirements admirably. It is a very deadly poison, is cheap, and can be had for the asking.

Is there no law that can refuse the sale of these poisons to those

who cannot put them to any legitimate use? It may be argued that those contemplating suicide will—if one means of carrying out their plan is denied them, resort to another—that they are not to be thwarted. This is not wholly true. How very many wouldbe suicides there are who deeply regret what they appreciate to have been a hasty action, caused perhaps by a thwarted indulgence in something greatly desired, an accusation of wrong-doing, illness, unrequited affection, or poverty—and who—if the means had not been so readily at command —would have gained if only a few minutes' time—sufficient, however, to tide them over a turbulent sea, and give them a moment of tranquil reflection. These few minutes of time saved may mean a life saved. Think of it: inaccessability to a poison may delay the carrying out of a resolution that is the decision of a moment, and is as quickly dispelled as it is given birth. It is this fact that must be considered, and, therefore, the greater the difficulties that are put in the way of the purchaser of poison, the fewer deaths by suicide will be chronicled. Some people, it is true, are so bent on terminating their existence that —foiled in one method—they will seek another, and ultimately accomplish their purpose. But they are in the minority by far.

Laws which it ought to be an easy matter to enact and enforce, would save many a wife to her children, many a husband to his family.

DOWIE ON EDDYISM.

The great "restorationist," Elijah II., among others of his many peculiar deliverances during his New York crusade, has favored us with his opinion on Mrs. Eddy and the alleged principles of Eddyism. It is really interesting to see two such stars of the first magnitude in the firmament of thaumaturgy brought in conjunction. Dowie remarks in his sermon on the subject of "Covetousness" that the only possible charm in Mrs. Eddy's book and philosophy is that they are "impossible to understand." One grain of truth he finds in Christian Science, namely, that God is not the author of disease. The rest of it he denominates "bosh." How this all fits in in a sermon on the subject of covetousness is not apparent from the newspaper extracts. If he were looking for an example of covetousness as flagrant as any seen in our time, he could hold the mirror up to himself.

It would be highly interesting now if Mrs. Eddy would favor us with her opinion of Dowie.

The healing exploits of each of these modern miracle-workers are practically the same, "with a difference." Christian Science may be epitomized in the following: "Imagine you are sick when you are not,

then espouse the doctrines of a prophetess who says there is no such thing as disease and you are cured." The other may be stated thus: "J. A. Dowie is a prophet possessing divine healing powers, which he has inherited from Elijah of old. You imagine you are lame or otherwise diseased and that this ancient prophet, come again to earth in a new guise, has divine healing power, and—*presto*—your disease is gone."

The question has been much discussed whether Dowie is of sane mind. He does not, however, appear to be otherwise mentally unbalanced than are all fanatics who work—some honestly, some dishonestly—under the guise of religion. A colossal vanity and conceit make it possible for him to allege these fantastic things about himself. He is no more insane than is a spirit medium who fancies, or pretends that spirits from the other world take possession of him and deliver miraculous messages from the spirit world. How much hypocrisy or how little may enter into Dowie's pretensions it is difficult to measure. He probably does not know himself.

The cruel logic of events has stripped him of his disguises one and all, and shown him a common mortal made of only common clay. Indeed, there seems to be a strain of the mountebank in him, and furthermore the advance of years is bringing out evidences of a superadded senility.

A TENT SCHOOL.

All work and no play will make Jack a dull boy, but the judicious combination of these two will build up a youngster tough in brawn and brain. Daily are we confronted with sad examples of pale-faced, large-eyed youths whose ambition makes them shun idleness and court an indoor life, and whose parents are blind to all but the brain development going on within. These children may grow up, 'tis true, but never possess that good physical vigor and resistance that life's battle demands.

When judiciously employed, the outdoor life with a minimum of books and a maximum of fresh air and sunshine, is an ideal plan for these youths. Such a happy scheme of education has been devised, and it deserves the recognition, commendation and support of everyone, especially of physicians, who—of all people—share with the parents this burden and responsibility. There exists a preparatory school in Arizona, in which boys can be fitted for college while roughing it in the open, camping out, enjoying all of nature's richest blessings, developing their muscles, widening their own horizons, and courting the acquisition of courage, independence and self-reliance.

Such a scheme of physical and intellectual discipline brings to the fore healthy qualities, the possession of which may be envied any lad, and and it goes without saying that the interaction of these—without subordinating one to the other—will produce a manliness good to behold.

A tent school on the plan of that of Henry D. Evans, of Arizona, will do much to reclaim the lad who is physically deficient, and help to throw off the hard yoke of inherited predisposition and of bad hygiene at home. Mr. Evans is a graduate of Cambridge who sought and found health in the west, and on good authority we learn that he is a most capable man, and that this tent school has had admirable success.

Such a school is worthy of emulation on the part of others, and Arizona, than which there is no State more suitable for this sort of life, offers a glorious climate, with scenery unsurpassed on the continent.

NEWS ITEMS.

New Sanitaria for Tuberculosis.— Dr. J. W. Coon, of Milwaukee, has organized a corporation for the purpose of establishing a sanitarium for tuberculosis in the central part of the State. It is expected that the sanitarium will be open for patients next summer.

A corporation has been formed by Dr. Gustav Kletzsch, Alvin C. Kletzsch and Herman Kletzsch, of Milwaukee, capital stock $25,000, for the purpose of establishing a sanitarium for tuberculosis at Summit Lake, Wis.

Dr. Sam C. Johnson, of Hudson, Wis., died Oct. 17th. Dr. Johnson has practiced in Hudson since 1865 and has for years been considered one of the most skillful physicians in the State. He served as an assistant surgeon in the Navy during the Civil War. He has been President of the State Medical Society, member of the State Board of Health, Surgeon General of the National Guard, and for the past few years has been in charge of the Hudson Sanitarium, of which institution he made a great success.

George P. Kaemmerling, M. D., College of Physicians and Surgeons, Chicago, 1902, was found dead in bed in his office in Port Washington, Wis., from heart disease, October 3. Dr. Kaemmerling was the secretary and treasurer of the Medical Society of Ozaukee County.

The Milwaukee Medical Society has removed from the 8th to the 3rd floor of the Goldsmith building, where fine new quarters have been fitted up for the accommodation of the members. The attendance of the first meetings of the year has been good and the society looks forward to a prosperous year.

CORRESPONDENCE.

A SUCCESSFUL SCARLET FEVER SERUM.

(Special Correspondence.)

For some time Moser, assistant of Escherich at the St. Anna Kinderspital, of Vienna, has been engaged in the preparation and therapeutic use of an antitoxin of scarlet fever. Although the results of his work, and that of Baginsky in Berlin along similar lines, are rather well-known through publications in medical journals, it may be well to report some of the conclusions which have been reached after a few years of experience.

Streptococci have been found in pure culture in the heart's blood of practically all fatal cases of scarlatina, and these are supposed to be the specific cause of the disease. They do not vary materially in appearance or in cultural characteristics from the ordinary streptococcus pyogenes; it is their presence in all fatal cases and the effectiveness of the antitoxin obtained from them, which have been the chief factors in establishing their claims for specificity. The presence of these bacteria alone in fatal cases would be insufficient, since in variola also a streptococcemia appears to be usual in fatal cases.

The preparation of the anti-toxic serum, while based on the same general principles, differs in some respects from that of the diphtheria serum. Cultures in bouillon are prepared from the heart's blood according to the methods usually employed in preparing blood cultures, *i. e.*, one c.c. of blood is introduced into 100 of nutrient bouillon. As in the case of diphtheria, the horse is used for the manufacture of the antitoxin, but in a different way. It will be remembered that in this case the toxin is injected into the horse and that antitoxin is thus produced. To make the scarlatinal antitoxin, the horse is inoculated with increasing doses of the streptococcus cultures, obtained from victims of scarlet fever. When the horse has ceased to react to the largest doses, blood is withdrawn by venesection and the serum used in the treatment of scarlet fever patients. It is claimed that this is better in the case of scarlet fever than the preliminary passage through other animals, since the streptococcus of scarlatina is especially apt to be modified by transmission from animal to animal.

It is very difficult to judge of the effects of the antitoxin in individual cases of scarlet fever, because the disease is so full of surprises. Those who appear most sick may recover without treatment rapidly and without complications, while the mildest in appearance may be followed by lymphadenitis, otitis, or nephritis. It is also well-known

that the variation in the mortality during different epidemics varies considerably without apparent cause. It is stated, however, that since the use of the antitoxin at the St. Anna Kinderspital, the death rate has decreased 50 per cent. Parenthetically it may be noted that in this hospital the prevailing opinion is that about 75 per cent. of all cases of nephritis in children are the result of scarlet fever. In all these cases, a fading rash or evidence of desquamation is carefully sought. As a result, almost all of the nephritic children at the St. Anna Hospital are in the scarlet fever wards.

Only the more severe cases are treated with antitoxin—such as have high temperature, rapid pulse, cyanosis or symptoms of nephritis. Evidence of nephritis in these children—in the order of their appearance—are: increased blood pressure, increased weight (due to edema), and finally changes in the urine. Frequently an affection of the kidneys is diagnosed three or four days before casts are disclosed. These severe cases receive hypodermic injection of 150 to 200 c.c. of the antitoxic horse serum. Moser has not yet made any concentrated antitoxin —such as is used in the treatment of diphtheria. The injection may be repeated in twenty-four hours, if the results do not correspond to expectations. If the cases are seen early, the treatment is most effective; unfortunately, many are not seen until they are moribund. The effect of the injections varies in individual cases. As a rule, there is said to be within six hours a much more marked decrease in the fever than is to be expected in the ordinary course of the disease; the temperature then rises again, but not nearly to its former height. The rash fades, the mind becomes clearer and the heart action more regular. Even incipient uremia, resulting from post-scarlatinal nephritis, is said to abate.

In addition to these results, the presence of the horse serum is usually in evidence. In most cases an intense urticaria appears about two weeks after injection of the antitoxin. This cannot be avoided as long as such large quantities of horse serum must be used, but the eruption disappears rapidly and no other toxic symptoms are seen.

Marmorck's antistreptococcus serum, which was used before the discovery of the new serum in all diseases in which the streptococcus was believed to be the exciting cause, has proved utterly worthless in the treatment of scarlet fever. (L. M. L.)

BALTIMORE LETTER.

ARTHRITIS DEFORMANS. PLAGUE IN INDIA. A CONSERVATIVE PERINEAL PROSTATECTOMY.

On May 18th the Johns Hopkins Hospital Medical Society held its regular meeting. The program was opened by the exhibition of a case of *arthritis deformans* by Dr. McCrae. The patient is a man 56 years of age and was admitted complaining of pain in the right side and leg. His family history is unimportant. He has been a moderate user of alcohol, but never to excess. His present illness began two years ago with a pain in the back which has been constant. The pain has been worse at night and he has been in the habit of getting up in the night and walking the floor to obtain relief. The pain has recently become more severe and it has gone down the right leg. Movements now aggravate the pain. The patient gives an almost pathetic history of consulting a dozen or more physicians with no relief. Most of them treated him for rheumatism, but a few called it "abdominal trouble." In walking the patient favors the right leg. There is little to be made out on examination. The patient is well nourished. The joints are negative and the reflexes diminished. There is no muscular wasting. The case on casual examination would be put down as one of neurasthenia, chronic rheumatism or sciatica.

The examination of the spine, however, gives the diagnosis. Inspection is negative. The back is a little bowed in the upper thoracic region, but no more than would be expected in a man of 56 who had worked hard all his life. The muscles of the back are all held very rigid. On having the patient pick up something from the floor he goes down with a perfectly stiff back. In stooping forward there is no movement below the 10th dorsal spine. The X-ray shows deposits of bone between the vertebræ thus clinching the diagnosis of spondylitis deformans. The only treatment in such cases is rest and this is best obtained by the plaster jacket.

In his remarks on the case, Dr. McCrae said that the process begins at the anterior aspect of the body of the vertebræ and advances along the anterior ligament. The symptoms will depend on the rapidity of the involvement. In rapidly advancing cases the Poker Spine is the result. On the other hand when it developes slowly the cartilages between the vertebræ are absorbed and in consequence the patient becomes bent forward. If the process extends posteriorly the nerves are pressed upon and peripheral disturbances result in the form of pain along the distribution of the roots involved. The process may be confined to only a few vertebræ or it may be a general process. Thus many of the minor complaints of pain in the back may be explained. During the day when the muscles are held rigid, the pain may be slight, but at night when relaxation takes place the pain may become very severe. The process may go on to complete ankylosis. Absolute rest is the first essential in the treatment. At first it is best to use a plaster jacket. This is worn for two or three weeks and then a lighter jacket is substituted and finally a light brace. Some support will probably be permanently necessary. In his remarks Dr. McCrae referred to the paper read at the recent meeting of the American Medical Association by Dr. Walsh on the "Passing of Chronic Rheumatism." Dr. McCrae's ideas are entirely in accord with those of Dr. Walsh, and he

thinks that the more these cases are studied, the less we will hear of chronic rheumatism.

Dr. McCrae's talk was followed by a paper on the *Plague in India*, by Dr. B. Rosalie Slaughter, of Washington. While in India she had an opportunity to study an epidemic of bubonic plague and was interested especially in the results obtained by the use of Haffkine's serum for rendering human beings immune to the disease. From the statistics she had gathered, the serum renders an individual immune for from four to six months. Reinoculation during the epidemics is, however, practiced every 3 months. After reinoculation it becomes active within 24 hours. The question has been raised as to whether the serum may not be harmful if injected into a person who is incubating the disease, but Dr. Slaughter's statistics seem to show that, far from doing harm, the serum seems to make the attack milder. It, however, has no effect on the course of the disease after the development of symptoms.

The last paper on the program was on the subject of "*A Conservative Perineal Prostatectomy*", by Dr. Young. The operation is one devised by Dr. Young himself. After the median incision in the perineum and the division of the central tendon and the constrictor urethræ, an opening is made into the urethra and through this a special instrument is introduced into the bladder. This instrument is so arranged that, after introduction, by turning a handle at the external end, the internal portion becomes T-shaped and can thus be used as a tractor. On making traction on this instrument the prostate is drawn up into the wound and enucleated. Dr. Young takes special care in his operation not to disturb the ejaculatory ducts. The bladder is irrigated for some time after the operation is completed. (R. G. W.)

THE MILITARY HOSPITAL AT MADRID, SPAIN.

By H. V. Würdemann, M.D., Milwaukee.

During a recent visit to Spain, through the kindness of Dr. Angel Morales Fernandez (Medico de Sanidad, Militar del Yereito, Espanol) Captain and Oculist to the great Military Hospital of Madrid, I had the opportunity of a thorough inspection of this modern and most excellent collection of hospital buildings.

The Madrid Military Hospital was founded in 1843, and occupies a large edifice within the old city on the Rue de la Princesse, which had been used by the "Company of Jesus" for the education of the children of the nobles. Modern sanitary science, however, showed the Spanish that this building was inadequate. It was used for a cholera hospital during the epidemic of 1885.

The new hospital was projected in 1873 under the direction of the Sanitary Military Corps, but the site was not selected until five years afterwards, when plans were drawn for buildings to contain 1,000 beds; however, it was not started until 1879, when orders were given for construction of edifices to contain 500 patients. The years went on

until finally, in April, 1887, most of the present construction was well under way, and at this date building operations are still continuing. The site is on an eminence in the environs of the little village of Bas-Carabanchel, about five miles from the west gate (Puerta del Sol) of Madrid, and for this reason it is sometimes called by the name of the village.

Being some distance from Madrid and unsanitary people and at an elevation of nearly a mile above the sea, the air is pure and conducive to good health. Although so near Africa, the climate of the Spanish highlands is remarkably cool except when the sirocco blows from the south off the Sahara, when the air is dry, dusty and suffocating. The winters of this locality are decidely severe (for Southern Europe) because in the north and west there are no near mountain chains to mitigate the wintry blasts.

The buildings are well arranged to meet these varying climatic conditions. A fair electric tramway system and a nearby railway station give easy access from the city and country.

The hospital is composed of twenty-four two-story brick buildings, some of them communicating with each other by glass walled galleries, the bricks being of porous red clay and laid in mortar without pointing, which method allows, together with the excellent ventilating system, of free percolation of air. I was particularly interested in this architectural feature, and wonder if the sacrifice of strength from the non-use of cement will make a great difference in the lasting qualities of the materials.

These twenty-four buildings are arranged in an irregular hexagonal reservation of about 100 acres and each pavilion is reserved for special work or cases. The central and front building is devoted to the guard, to the direction, and the resident surgeon; back of this is the convalescent building; in the central area are the chapel and other buildings devoted to genito-urinary diseases, infectious diseases, internal maladies, surgical cases, tuberculosis, insanity. These are two-story and basement buildings, with four large wards, each extending from the central hallways. The post-mortem building, that for the laboratory and teaching of post-graduate military medicine and the operating theater, are models.

Operations are conducted in a separate pavilion, but this is connected by a covered way with the two surgical pavilions, so that no exposure of patients to inclement weather is necessitated.

The laboratory, drug and subsistence departments are in the same building and are thoroughly modern.

I was much interested in the preparation of microscopic specimens of pathogenic organisms which are prepared in large numbers here by Dr. Morales, and in the wax models of various external diseases which are made by his assistant for teaching purposes in the "school for instruction of medical officers" held in the same building.

There is likewise a complete photographic department, the intelligent use of which is attested by numerous photographic prints. A Roentgen-ray apparatus is likewise in constant use.

There are isolation pavilions for mental diseases (*los locos*) and for infectious diseases, and separate wards for syphilitic and gonorrheal cases, which here, as in other armies, make up a large proportion of the medical cases. Syphilis among the Spaniards seems more severe than with us; many cases do not apply for treatment until the deeper lesions appear. There were a number of cases of syphilitic peri- and osteitis (including a severe case of orbital periosteitis and cellulitis) in the wards; the wax models before mentioned, which were made from casts of patients, showed the prevalence of the gravest syphilitic lesions, such as we rarely see in America.

The steam laundry, disinfection rooms, stables and heating plant (hot air) are thoroughly modern.

There are about a dozen surgeons in daily attendance, of whom only the surgeon-in-chief and the medical officer on duty for the day reside in the hospital. The others live in Madrid and have a little time for private practice. Surgeons when not on duty spend their time about the grounds or in the administration building, where there is a library and large well furnished rooms for their accommodation.

There are twenty Sisters of Charity and a company of men from the Sanitary Corps. Ample accommodations are provided for 400 patients (at the time of my visit there were 325), but the hospital could readily take care of double the number.

The *tout ensemble* of the hospital and the *personnel* of the staff shows that as regards military surgery the Spanish have reached the stage of asepsis and sanitary science. The military surgeons of Spain may well feel proud of this institution.

CLINICAL REPORTS.

BRACHIAL MONOPLEGIA OF HYSTERICAL ORIGIN FOLLOWING A DOG-BITE.

By W. F. Becker, M.D., Milwaukee.

This case was referred to me by Dr. Philip Rogers, Milwaukee, the patient complaining that he could not use his right arm and was, therefore, unable to work. He is nineteen years old, a brass plater, in previous good health, with no specific history, and a negative family history.

About three months ago, while the patient was passing through the factory door, a large Newfoundland dog snapped at his right hand, a tooth of the animal piercing the skin at the metacarpo-phalangeal junction on the back of the hand. A few drops of blood appeared, but he thought no more of it and went to work on his machine. Twenty minutes later the arm and hand began to be painful and in his own language, he "began to worry and wonder what it was going to turn out to be and thought of hydrophobia." Thereupon his fellow workman tied a tight bandage around his arm to prevent absorption of the supposed poison. After this he fainted and remembers nothing until he awoke and found his arm paralyzed. Dr. Rogers was called when the patient fainted and found him in convulsions, held down by six men, struggling and apparently only semi-conscious. This condition, with repeated convulsions, lasted for about half an hour, when he came to and began to cry and complained of pain in his arm.

There was never any sign of inflammation about the wound, which healed quickly and no scar shows its position to-day. The dog was never rabid or sick and is alive at the present time.

On examination of the paralyzed hand and arm soon after, a condition of anesthesia was discovered to the patient. The hand and arm hung quite motionless, the fingers being semi-flexed.

When I saw the patient for the first time, about two months after the accident, he still complained that he could not move his arm. Yet it was noticeable that he made various automatic movements of the same, such as rubbing the palms of the hands together in expression of impatience. Voluntary motion, however, was very limited. During the test of his stereognostic sense, which was something of diverting "play" to him, he was able to open a small paper match box, extract a match therefrom, return the same and close the box—all with the affected hand. There was also some limitation of motion in the shoulder muscles. There was no atrophy, however, although of several months standing, nor were there any changes to Faradism or Galvanism, nor any R. D. Electrical resistence, which has been found disordered in these cases, was not measured.

On testing the sensation, total anesthesia of the hand and forearm was found. The sensations to pain and temperature were also lost. Needles could be passed into the skin unfelt over the same areas. There was no bloodless phenomenon on pricking such as we often find in hysterical anesthesias, or more truly hemi-anesthesias. There were no hemi-anesthetic phenomena whether of the general sensation or the special senses, nor was there any contraction of the visual field. The muscular sense, localization, spacing, pressure were all intact in the affected region. So, too, the stereognostic sense. It is noteworthy that while apparently total analgesia existed there was pain on applying the static current over the analgesic areas. This pain was not due to the muscular contraction which ensued and which was very painful, but existed when the current touched the ligamentous and bony structures, suggesting the still disputed existence of a separate electrical sense. Richet and others found hystericals who were without sensation to electricity while retaining other forms of sensibility. This case does not necessarily strengthen the separate existence of electrical sensibility. It is more likely that there was really not a complete analgesia and that the severe pain induced by the electric spark was felt while that of a prick to the point of bleeding was unfelt.

Mentally the patient was unconcerned and apathetic, exhibiting in a great measure that absentmindedness—that "contraction of the field of consciousness" mentioned by the French school of hysteriographers.

The mobility characteristic of hysterical anesthesia was at once apparent in this case, the anesthetic areas changing under suggestion, concentration, the static current and metallotherapy. By bandaging a small zinc plate to the arm the anesthesia invariably disappeared under the point of contact of the plate, only, however, to return in some measure again. So also was it easy to transfer the anesthesia to the corresponding area of the unaffected arm though it did not remain transferred very long. While this is true, however, there has been a gradual improvement in the last two weeks under the influence of these measures. With this improvement in sensation motor power has also improved.

The mental relation of hystericals to their anesthesia was pronounced in this case. It is very different from that which patients exhibit toward organic anesthesias. It is as if there were a sort of absentmindedness of the skin, as if the patient has forgotten to feel, just as he may be said to have forgotten how to move—a true

amnesia—finding its explanation in that illuminating phrase of the French mentioned above—"contraction of the field of consciousness." The hysterical is commonly unaware of his anesthesia and entirely untroubled by its existence. Organic anesthesias, on the other hand, are apt to trouble patients very considerably.

The question of malingering was strenuously raised when this patient was exhibited before the Society. The bizarre and contradictory nature of the symptoms make such explanation very inviting in these cases, especially the existence of the automatic and reflex movements of the arm when the patient is unaware. It is apt to look to the observer as if the patient moved when he was off his guard. The existence of reflex and automatic movements in parts where voluntary movement however is entirely lost, is a very common pitfall to those who easily rush to the explanation of shamming. Malingering was further untenable in this case by the fact that the existence of the anesthesia was unknown to the patient before his attention was called to it. The mobility and other features of the anesthesia also make it impossible. Further proof, were it necessary, could be offered in the control tests by which the patient is pricked with a needle when off his guard and to the point of bleeding and without flinching. In this connection it may be said that some persons may control the exhibition of pain, but even Dr. Witmer's phenomenal patient who could voluntarily inhibit his pain sense, could probably not endure the severe pain tests applied if he had not in advance placed himself in certain relation to his pain sense and if he were taken unawares.

Lastly, a matter of interest in this case is the preservation of the stereognostic sense. Not that it is rare, but attention has only recently been directed to the matter. Notwithstanding that the patient's tactile pain and temperature senses were lost, he could at once distinguish familiar objects placed in the affected hand, the eyes being closed—a match, a pin, a coin, a key, etc. One would suppose that the ability to recognize objects from contact lay in the integrity of the touch sense. But it does not. A case is mentioned in the literature by Dercum or Mills of a young woman who was totally anesthetic in her hand, yet frequently used the affected hand to draw her handkerchief from her belt, to blow her nose. In the same way my patient was able to extract and return a match from a match box with the anesthetic hand. Such cases are not at all rare and would turn out to be very frequent did we examine for them. For it is now well established that the tactile sense is not an important factor in the make-up of the stereognostic sense; that it is not through the sense of touch that we

recognize familiar objects by the hand but by other sensations, such as those of deeper pressure, localization, spacing, muscular, weight, etc. (which are not all differentiated) and which fuse and give us the higher concept center of stereognosis which is a function that is in greater use than we commonly believe—the handling of things that we do not distinctly look at. These are intact in this patient and he is therefore able to distinguish objects by contact notwithstanding his tactile sense is lost.

On the other hand, the stereognostic sense is often lost, where the tactile, temperature and pain sense is retained, as in a case which I reported before the State Society. In this case there was no affection of the cutaneous and muscular sensibility except a slight distortion of localization.

AN UNUSUAL ABDOMINAL CASE.

By E. W. Kellogg, M.D., Milwaukee.

Mrs. E., age 36, weight 110 pounds, German. Mother of six children and the hard-laboring wife of a farmer. During her first pregnancies she was attended by a midwife. No abdominal bandage was used, and she began labor in the field soon after confinement.

When called to see her I found her in labor. Contractions were powerful and regular, but the cervix was anterior to and below the os pubis, and beyond vaginal reach. The fundus lay between her knees upon the bed.

The uterus was easily "ended over," and with a few vigorous pains she was delivered. She became pregnant again and during the first three months the uterus lay completely retroverted with the fundus in the hollow of the sacrum.

The abdomen was flat and hung like an immense scrotum nearly to her knees. This abdominal wall, or rather sack, was about half an inch in thickness, without any apparent muscular or adipose tissue in it. When she was recumbent it could be raised, forming a tent-like structure, the apex of which was nearly two feet above the bed upon which she lay.

When the pregnant uterus was anteverted it fell forward into the sack where it hung in a perpendicular position, fundus down. When the patient was erect, and when she was recumbent it lay upon her thighs. During the later months of pregnancy walking was almost an impossibility. Many kinds of abdominal supports were used without much benefit.

She preferred to "let it swing." Deliveries were normal and eas-

ily managed after the uterus was "ended over." This required no special effort.

An operation for the relief of this condition and prevention of more pregnancies was advised. She was taken to the hospital. Through an incision in the median line the ovaries were removed and the fundus stitched to the abdominal wall. Then an oval section of the wall above the point where the uterus was sutured, was removed. This section was eight inches wide, fourteen inches long, and about half an inch in thickness. It was composed of skin and fibrous tissue, with no muscular or adipose tissue whatever. The immense opening was closed with silkworm and catgut sutures, the patient leaving the hospital on the fourteenth day, after an uneventful recovery.

Recent Investigations Bearing on Infectious Diseases of Unknown Etiology.—HEKTOEN (*Jour. A. M. A.*, Aug. 15 and 22, 1903) concludes that clinical and experimental observations furnish strong evidence, and in some cases absolute proof, that certain transmissible human and animal diseases of unknown etiology are not toxic, but infectious, that is caused by living organisms, capable of proliferation and metabolic activities. In the case of the human diseases of this group, knowledge is farthest advanced in regard to those that are communicable to animals, hydrophobia, vaccinia and smallpox —and experiments on human beings have shown that the cause of yellow fever occurs in the blood, passes through Berkefeld filters, the filtrate being bacteriologically sterile, according to present methods, and that infection occurs through the medium of mosquitoes. The etiology of the other strictly human diseases—syphilis, measles, scarlet fever, chicken-pox, typhus fever—remains unknown.

Certain morphologic elements in the lesions of vaccinia and smallpox are regarded by some investigators of the highest standing as representing stages in the developmental cycles of protozoa. The causative agents of these diseases do not pass through bacteria-proof filters.

The virus of many transmissible animal diseases (foot and mouth disease, peripneumonia, rinderpest, sheep-pox, chicken typhus, horse sickness, epithelioma contagiosum of fowls) passes through various filters ordinarily regarded as impermeable to the smallest known bacteria, the filtrates being virulent, though giving no sign of containing corpuscular elements. Whether these invisible, and except in the case of peripneumonia, uncultivable viruses are all ultra-microscopic in size, or invisible also for other reasons has not been settled definitely, but there is much in favor of the view that they are ultramicroscopic in size. (A. W. M.)

THE STATE MEDICAL SOCIETY OF WISCONSIN.

ORGANIZED 1841.

Officers for 1903-1904.

F. E. WALBRIDGE, Milwaukee, President.
JAMES MILLS, Janesville, 1st Vice-Pres. C. C. GRATIOT, Shullsburg, 2nd Vice-Pres
CHAS. S. SHELDON, Madison, Secretary. S. S. HALL, Ripon, Treasurer.

Provisional Councilors.

1st Dist., J. G. Meachem, - - - - Racine.
2nd Dist., J. S. Walbridge, - - - - Berlin.
3rd Dist., C. S. Smith, - - - - - Elroy.
4th and 5th Dist., G. A. Kletzsch, - Milwaukee.
6th Dist., Geo. V. Mears, - - - Fond du Lac
7th Dist., W. T. Sarles, - - - - Sparta.
8th Dist., J. F. Pritchard. - - Manitowoc.
9th Dist., T. J. Redelings, - - Marinette.
10th Dist., J. M. Dodd, - - - - Ashland.
11th Dist., E. L. Boothby, - - - Hammond

Next Annual Session, Milwaukee, June, 1904.

The Wisconsin Medical Journal, Official Organ.

SOCIETY PROCEEDINGS.

ORGANIZATION NOTES.

Meeting of the Council of the State Society.

According to appointment the Provisional Council of the State Medical Society met at Milwaukee, October 13th, 1903, at the rooms of the Milwaukee Medical Society, and was called to order by the Chairman, Dr. W. T. Sarles of Sparta, at 1:30 o'clock P. M.

There were present Drs. F. E. Walbridge of Milwaukee, S. S. Hall of Ripon, W. T. Sarles of Sparta, Herman Reineking of Milwaukee, J. M. Dodd of Ashland, John Meachem of Racine, E. L. Boothby of Hammond, G. A. Kletzsch of Milwaukee, and C. S. Sheldon of Madison.

The secretary reported the progress made in organization to date. Out of the 72 counties in the state—taking into account the union of some of the smaller counties, we may reasonably expect that about 64 societies will be formed. There are already organized 46 societies. Of these, however, only 38 have reported to the secretary. In these 38 societies there are 801 members of which 300 were already members of the State Society, making a net gain in membership of 501.

Since the October report in the JOURNAL the following counties have reported: La Crosse, 15 members; Sheboygan, 20 members; Oneida, 5 members; Lincoln, 18 members; Marathon, 18 members; Outagamie, 25 members; Iowa, 15 members; Langlade, 5 members; Iron, 5 members; Portage, 15 members; Columbia, 15 members; Bayfield, 5 members; Washburn-Sawyer-Burnett, 8 members.

There are now only 19 counties in the state unorganized, though the organization has not been completely effected in some of the

others. By the 1st of January, 1904, it is hoped and expected that every county in the state will be in line.

The following resolution was offered by the secretary and unanimously adopted: "Resolved, that a credit of one dollar be allowed all members of the various County Medical Societies who have paid their dues to the State Society before October 13th, 1903, which sum shall be applied upon the dues of 1904, and that all societies or members of societies paying their dues ($2.00 to the State Secretary) subsequent to that date shall be credited with the dues for 1904—(to Jan. 1, 1905) and shall be entitled to the WISCONSIN MEDICAL JOURNAL from the date of payment."

There followed an informal discussion of the clause in the Constitution referring to the qualifications for membership, particularly as regards those who are members of Homeopathic of Eclectic Medical Societies. While no formal action was taken, it was the sense of the Council that individual cases must be acted upon and decided by the local society, since, according to the Constitution, "the Society (County) shall judge of the qualifications of its members." That the clause in the application by which the applicant agrees "to support its Constitution and By-Laws—to practice in accordance with the established usages of the profession, and will in no way profess adherence or give any support to any exclusive dogma or school," should be fully explained and interpreted; that if applicant is a desirable man, and is willing to conscientiously sign and stand by this declaration, he should be admitted.

An informal discussion followed as to the formation and boundaries of District Societies, but it was decided to take no definite action till the Annual Meeting.

Dr. Herman Reineking presented his resignation as Councilor of the Sixth District by reason of his removal to Milwaukee. On motion his resignation was accepted, and Dr. George V. Mears of Fond du Lac was elected in his place.

On motion it was voted by the Council that ($100.00) one hundred dollars be added to the salary of the secretary for the year ending at the time of the Annual Meeting in June.

On motion ($25.00) twenty-five dollars was added to the salary of the treasurer for the same time. On motion the Council adjourned.

From the above action of the Council it will be seen that those who have paid their dues to the State Society before October 13th, will pay only $1.00 as dues for 1904, while all County Societies or individual members who pay subsequent to that date will be credited with dues to January 1st, 1905. When this is the case the $2.00 dues will be collected from each member of the Society, whether a member of the State Society already or not.

According to the Constitution for County Societies the annual meeting for the election of officers should take place in December. Most of the County Societies have decided to admit applicants as charter members till after this meeting. It is hoped that this December meeting will prove a general "round up" all over the state. If already organized, get in every good man in the county while he

may join as a charter member. If still unorganized, make December the month in which to gather in the 19 counties still outside the fold, and begin the new year with a clean record. This is entirely practicable and no more than all the states about us have done. The Councilors and officers will be glad to help all they can in the work.

C. S. S.

CHIPPEWA COUNTY MEDICAL SOCIETY.

At a meeting held at Chippewa Falls on Sept. 29, the Chippewa County Medical Society was organized with an initial membership of fourteen. The election for officers resulted as follows: President, Dr. Charles A. Hayes, Chippewa Falls; vice-president, Dr. Robert Cottington, Bloomer; secretary and treasurer, Dr. Robert B. Cunningham, Cadott; censors, Drs. Hugh McCormick, Auburn; Herbert H. Hurd, Chippewa Falls, and Eugene P. Ellenson, Chippewa Falls.

DANE COUNTY MEDICAL SOCIETY.

At a meeting of the physicians of the County, held in the senate chamber, Madison, Sept. 17, the Dane County Medical Society was organized and a committee appointed to consider the adoption of the constitution and by-laws recommended by the American Medical Association. The following officers were elected: President, Dr. Cornelius A. Harper, Madison; vice-president, Dr. William F. Pinkerton, Mazomanie; secretary and treasurer, Dr. Reginald H. Jackson, Madison; censors, Drs. J. C. Cutler, Verona; Charles S. Sheldon, Madison, and Daniel B. Collins, Madison.

DOUGLAS COUNTY MEDICAL SOCIETY.

At the regular monthly meeting of the Douglas County Medical Society, September 2d, Dr. P. G. McGill read a paper reporting his experience with abnormal obstetrical cases in the past six months. He reported three cases of placenta previa, one of Caesarian section, one face presentation, two breech presentations, and one case of retained placenta. This was the last meeting of the old society.

On the evening of September 15th, the physicians of Douglas County met at the Hotel Superior and effected a re-organization of the Society, accepting the new constitution and by-laws, as formulated by the committee of the American Medical Association, and retaining the old officers. Thirty out of the thirty-six physicians now practicing in the county signed the new constitution.

S. G. PAKE, M. D., Secretary.

GREEN COUNTY MEDICAL SOCIETY.

On October 16, the Green County Medical Society was organized at Monroe and the constitution and by-laws formulated by the American Medical Association were adopted. The following officers were elected: President, Dr. Samuel Moyer, Monroe; vice-presidents, Drs. T. W. Nuzum, Brodhead, and Henry B. Gifford, Juda; secretary, Dr. William B. Monroe, Monroe; treasurer, Dr. John G. Randall, Monroe; delegate to the state society, Dr. Nathan A. Loofbourow, Monroe; alternate, Dr. Eli W. Fairman; censors, Drs. George W. Roberts, Albany; William B. Gnagi, Monroe, and Elias J. Hegesen, Glarus.

JEFFERSON COUNTY MEDICAL SOCIETY.

At a meeting held at Jefferson September 8, the organization of the Jefferson County Medical Society was completed and the constitution and by-laws recommended by the American Medical Association adopted. The following temporary officers have been elected: President, Dr. William W. Reed, Jefferson; secretary and treasurer, Dr. C. E. Lauder, Johnson Creek: censors, Drs. Carl R. Feld, Watertown; William A. Engsberg, Lake Mills, and Urban P. Stair, Fort Atkinson.

JUNEAU COUNTY MEDICAL SOCIETY.

At a meeting held at Elroy on September 10, the Juneau County Medical Society was organized. The election of officers resulted as follows: President, Dr. John B. Edwards, Mauston; vice-president, Dr. R. W. Hoyt, New Lisbon; secretary and treasurer, Dr. A. T. Gregory, Elroy; state delegate, Dr. E. H. Townsend, New Lisbon; censors, Drs. C. S. Smith, Elroy; J. E. Smith, Mauston, and C. H. Golden, Wonewoc.

The next meeting of the society will be held on the first Tuesday in December.

Dr. Daly, of Reedsburg, was present at the meeting as a visitor.

A. T. GREGORY, M. D., Secretary.

LA CROSSE COUNTY MEDICAL SOCIETY.

The regular monthly meeting of the La Crosse County Medical Society was held at the New La Crosse Club rooms, on October 1. The paper of the evening was one on "Iritis," by Dr. E. R. Mulford, of La Crosse; it was generally discussed by the members present.

Dr. M. V. Beust was admitted into membership in the society.

An amendment to the by-laws was introduced to the effect that any member who should absent himself from the society meetings for one year without giving good reason, be fined one dollar before readmittance.

C. H. MARQUARDT, M. D., Secretary.

LA FAYETTE COUNTY MEDICAL SOCIETY.

The regular meeting of the Lafayette County Medical Society was held at Darlington, October 13. Eleven members were present.

Drs. C. A. Hansen, O. L. Hansen, H. E. Scott, A. Brown, O. T. Woolheiser, R. J. Fairchild and A. McKellar were admitted to membership.

Dr. C. C. Gratiot read a paper on "The Country Practitioner," which was well received. He was requested to have it appear in the State Journal.

A paper on "Headaches Due to Eye-Strain" was read by Dr. Larsen, in the discussion of which Drs. Hyne and Gratiot took part.

The next meeting will be held at Darlington, Jan. 12, at which time officers for the ensuing year will be elected.

C. LEHNKERING, M. D., Secretary.

LANGLADE COUNTY MEDICAL SOCIETY.

The physicians of Langlade County met at Antigo, October 9, and organized a county society, with the aid of Dr. John M. Dodd, Ashland, councilor for the Tenth District. The following officers were elected: President, Dr. Ignatius D. Steffen, Antigo; vice-president, Dr. Michael J. Donohue, Antigo; secretary and treasurer, Dr. Frank I. Drake, Antigo; delegate to the state society, Dr. Ignatius D. Steffen, Antigo; censors, Drs. Michael J. Donohue, Fred V. Watson, and Dr. Flatley, all of Antigo.

MARQUETTE COUNTY MEDICAL SOCIETY.

The Marquette County Medical Society was organized at Packwaukee, September 8th, adopted the new constitution and elected Dr. W. J. Thompson, Briggsville, president; Dr. W. O. Dyer, Westfield, secretary and treasurer.

MEDICAL SOCIETY OF MILWAUKEE COUNTY.

The regular monthly meeting was held in the trustees' room, Public Museum Building, October 9, Dr. A. J. Burgess in the chair. Forty-five members were present. Papers were read by Dr. F. Shimonek on "Inoculability of Malignant Disease of the Uterus. Is Vaginal Hysterectomy to be Abandoned?" and by Dr. C. O. Thienhaus on "Clinical Manifestations of Malignant Disease of the Female Genital Tract."

Future meetings of the society will be held in the same room.

A. W. GRAY, M. D., Secretary.

MONROE COUNTY MEDICAL SOCIETY.

At a meeting held at Sparta on October 6, the physicians of the county organized the Monroe County Medical Society under the constitution and by-laws suggested by the American Medical Association. The following officers were elected: President, Dr. George R. Vincent, Tomah; vice-president, Dr. Crawford E. Phillips, Wilton; secretary and treasurer, Dr. Carl M. Beebe, Sparta; delegate to the state society, Dr. Wilbur T. Sarles, Sparta; censors, Drs. Jacob J. Simonson, Tomah; Cornelius H. Cremer, Cashton, and Fred P. Stiles, Sparta.

OUTAGAMIE COUNTY MEDICAL SOCIETY.

The Outagamie County Medical Society met at the Sherman House, Appleton, on October 7. Thirteen members were present.

The following made application for membership and were admitted: Drs. C. E. Ryan, Elizabeth D. Böyer, H. E. Ellsworth, F. H. Kreiss, T. T. Beveridge, all of Appleton; H. B. Tanner, Kaukauna; Wm. E. Zilisch, Hortonville, and Jas. S. Sorensen, Schiocton. The membership is now twenty-five. The next meeting will be held at Kaukauna, December 2.

M. J. SANDBORN, M. D., Secretary.

WASHINGTON COUNTY MEDICAL SOCIETY.

The third meeting of the Washington County Medical Society was held at the residence of Dr. J. E. Reichert, in Schlesingerville, on Wednesday, September 30. The meeting was called to order by Dr. Henry Blank, vice-president, the president being absent. Dr. Reichert read a very exhaustive and instructive paper on "Exstrophy of the Bladder," and in connection with the paper presented a case of that disease in a girl aet. 10 years. The case as well as the paper were very thoroughly discussed by the members present. Dr. Wehle read a brief paper on the treatment of typhoid fever, which was followed by a free discussion.

The next meeting will be held at West Bend on the last Wednesday in December; it being the annual meeting there will be no scientific program.

The following new members were admitted: W. J. Wehle, West Bend; N. E. Hausmann, Kewaskum; G. H. Rheingans, South Germantown; H. F. Weber, Newberg.

G. A. HEIDNER, M. D., Secretary.

WAUPACA COUNTY MEDICAL SOCIETY.

The meeting of the Waupaca County Medical Society was held at New London on September 29, with a charter list of nineteen mem-

bers. Dr. T. E. Loope, of Iola, read a paper on "Electro-therapeutics in the Non-surgical Treatment of Goitre."

The next meeting will be held at Weyauwega, Tuesday, December 29. J. F. CORBETT, M. D., Secretary.

WINNEBAGO COUNTY MEDICAL SOCIETY.

The first meeting of the season was held October 5, at Hotel Athearn, Oshkosh. Dr. Oviatt presented a very interesting clinical case; an injury to an arm at the elbow joint, of four months standing, with wrist drop and local anæsthesia, extending four or five inches above the elbow joint on the inner aspect.

Dr. Jasperson, of Neenah, had written a paper on hip joint disease for the meeting, but, as he was unable to be present, he requested the secretary to read it. Some good points in discussion were brought out by Drs. Oviatt and Gudden. A. O. Anderson, the blind masseur, read (by touch) a very interesting paper on massage.

The next meeting will occur November 2 at the Athearn Hotel. Supper at 6 p. m. and business meeting at 7 p. m.

S. B. ACKLEY, M. D., Secretary.

BRAINARD MEDICAL SOCIETY.

The quarterly meeting of the Brainard Medical Society was held at the Milwaukee Hospital, October 14, the president, Dr. Hugo Philler, in the chair.

Thirty-six members were present and several new members were admitted. A number of cases were presented for diagnosis and Dr. Beffel exhibited several fresh pathological specimens.

The Committee on Gynecology reported on Retro-displacements of the Uterus as follows: Etiology, Dr. C. W. Oviatt, Oshkosh; Symptomatology, Dr. H. Reineking, Milwaukee; Treatment, Dr. Thomas Fitzgibbon, Milwaukee.

The subject was discussed by Drs. Mishoff, Oviatt, Thienhaus, Reineking and Fitzgibbon.

Dr. Margaret Caldwell, of Waukesha, presented a paper on "Treatment of Gynecological Diseases with Especial Reference to the Violet Rays." She reports good results from the use of the violet rays. Dr. Caldwell's paper was discussed by Drs. Reineking, Thienhaus and Fitzgibbon.

Subject for discussion: "Surgical Operations in Obstetric Practice," was opened by Drs. Harrington, Sayle and Hipke, and was generally discussed.

Subject of discussion for the next meeting will be "Tuberculosis of the Hip." The Committee on Practical Medicine will report at the next meeting, which will be held at the Milwaukee Hospital on the second Wednesday of January.

N. E. HAUSMANN, M. D., Secretary.

FOX RIVER VALLEY MEDICAL SOCIETY.

The regular quarterly meeting of the Fox River Valley Medical Society was held at Oshkosh, Tuesday, Oct. 20th, 1903. The Society was called to order by the President, Dr. P. J. Noer, of Menominee, Mich. Thirty-three members and guests were present.

A paper was read by Dr. T. J. Redelings, of Marinette, on "Typhoid Fever." The history of the disease was outlined, and the pathology thoroughly discussed. The etiology of typhoid was particularly discussed, and the possible sources of contamination through water, milk, garden vegetables, ice, etc., were mentioned, not forgetting the common house-fly. Imbibing the bacillus does not necessarily cause the disease. In large epidemics not more than 20 per cent. of those so exposed take typhoid. Diagnosis depends not on a grouping of symptoms, but on the discovery of the bacillus. The agglutination test is a great help in diagnosis. The diazo reaction is of doubtful utility. A clear history of the onset of the disease is a great aid in making a probable diagnosis. Errors are impossible to avoid. In a series of selected cases at Johns Hopkins Hospital, 6 per cent. of errors occurred. An important aid is found in the diminution of the number of white blood cells. Prognosis depends on the age, the severity of the attack and of the epidemic in general, alcoholism, obesity, etc. Treatment is summed up in careful nursing, vigilance, readiness in emergencies, proper food, and hydrotherapy. Alcohol has no place in the treatment.

A paper was read on "Laboratory Tests for Typhoid," by Dr. C. J. Combs of Oshkosh. Many tests have been advocated, and found to be unreliable. Hypo-leucocytosis occurs in 90 per cent. of all cases, and is an invaluable aid in diagnosis. It furnishes an admirable means for discrimination between typhoid and cases of sepsis. There may be only 1,000 white cells in a cubic mm. There is a diminution of the polymorphonuclears to 50 per cent., and an increase of the mononuclear elements. There is also a slight increase of eosinophilic cells. These peculiarities occur early in the disease. The diazo reaction is present in all but mild cases, disappearing with convalescence, but it is also present in other diseases. The Widal test is the most certain, but not often possible for the general practitioner to apply. The test was fully described.

A very interesting informal talk was given by Dr. Charles Mayo, of Rochester, Minn., on wound healing, especially with reference to the way it is affected by the condition of the lymphatics.

An interesting and very practical demonstration of the modern methods of determination of the blood pressure was given by Dr. G. W. Crile, of Cleveland, with suggestions on the conclusions to be drawn from the use of apparatus.

On motion the society adjourned.

JAMES S. REEVE, M. D., Secretary.

MILWAUKEE MEDICAL SOCIETY.

Meeting of October 13, 1903.

President Burgess in chair.

Dr. A. N. Baer read a paper on "Physical Healing Methods." Under this title Dr. Baer presented the claims of hydrotherapy, electrotherapy, radiotherapy, massage, etc., and called attention to the fact that this field has been left open to quacks through its neglect by physicians. The paper was discussed by Drs. Seaman, Sickles, Stack, Mischoff, and by Dr. Herschman, a guest.

Dr. Boorse reported for the Milwaukee Medical Society Milk Commission that notices had been sent to all milk dealers, stating the terms upon which certificates of approved milk would be granted by the society. Only one dealer, Mr. Kieckhefer, has signified an intention of applying for a certificate. Prof. Alexander, of Madison, has been appointed veterinarian for the Commission; Dr. F. C. Darling, of this city, bacteriologist; the chemist is still to be appointed. Dr. Boorse asked for expressions of opinion as to the probable financial success of a Walker-Gordon Milk Laboratory in Milwaukee; discussed by Drs. Myers, Nielson and Brooks: opinions were discouraging. Plans and pictures of the Kieckhefer dairy building were exhibited.

Regular Meeting, October 27, 1903.

President Dr. Burgess in the chair.

Dr. Hitz reported a case of deformity of the external nose treated by paraffin injection. He referred to the early operations in which this method had been used and reviewed the various conditions in which its usefulness had been demonstrated. The method is not without danger as a number of deaths have been reported after its use, probably from pulmonary embolism. The difficulties in the technic were considered. The case reported was that of a man suffering from hypertrophic rhinitis of some years standing, upon which an acute infectious condition, possibly erysipelatous, became engrafted, with a complete destruction of the cartilaginous septum as a result, the mucous membrane remaining intact. The paraffin injection corrected the deformity in a very satisfactory manner. The after treatment consisted simply of the application of iced compresses wrung out of boric acid solution. Photographs representing the condition before and after the injection were shown.

The paper was discussed by Dr. Seaman, who referred to the ease with which this method of treatment could be carried out by the general practitioner.

Dr. Studley exhibited a very interesting specimen of heart and aorta from a case of complete transposition of the viscera. Death resulted from the rupture of an aneurysm of the first portion of the aorta into the pericardial sac. The heart was greatly hypertrophied, weighing over two pounds. The lobulation of the lungs was normal, but the other viscera were completely transposed. Dr. Studley said that in looking up the literature on the subject he had been struck

by the frequency with which these cases die from rupture of an aneurysm, and he suggested that they were poor insurance risks on that account.

Dr. Sayle exhibited a specimen of an umbilical cord showing an extremely tight twist causing the death of the foetus at the sixth month, and also a specimen of an hypertrophied sesamoid bone removed from a man's thumb.

WILLIAM THORNDIKE, M. D., Secretary.

AMERICAN PUBLIC HEALTH ASSOCIATION.

The 31st annual meeting of the American Public Health Association, held in Washington on October 26th to 30th inclusive, was of much interest in many respects. There was an unusually large number of members present, and much interest was manifested in the deliberations. The reports of the various committees were complete and contained much of importance which developed interesting discussions. Among the more important subjects taken up was that of the question of the transmission of tuberculosis from animal to man. The report of Dr. M. P. Ravanel was universally accepted to the effect that Prof. Koch made a mistake in his claim, and that the matter was now practically settled that the disease is conveyed from animal to man, and that no precautions should be neglected to protect the public health against the invasion of tuberculosis through diseased meat and infected milk.

Also the subject of yellow fever as being transmitted only by the mosquito was carefully considered, and the experience of Dr. Finley and Dr. Guiteras of Cuba, would seem to prove this conclusion correct beyond all controversy. Nevertheless, certain authorities in some of the southern states were not yet convinced that the mosquito was the only host for the transmission. The fact that the mosquito becomes infective only after a lapse of 12 days was commented upon, as it gives the authorities great opportunity to prevent the spread of the disease. Cases were cited as occurring in Havana, of persons suffering with yellow fever who lived at home for several days, and exposed a large number of people, finally going to the hospital—as is the custom in that city—where the disease was first detected. These patients were then sent to the Isolation Hospital, and all of the mosquitoes in the block in which they lived were destroyed; no case of yellow fever resulted from the exposure, all of the mosquitoes having been destroyed before the expiration of 12 days from the time they could have bitten the patient suffering from the fever. Moreover, cases of yellow fever are treated in the same wards with other patients who are non-immuned, and no infection has taken place in a single instance, the only protection taken being to have the doors and windows impervious to the mosquito.

The subject of Car Sanitation also created a lively discussion, in which it was stated by one speaker that he was informed by certain railroad officials that the blankets in their sleeping cars were washed but once in six months. This statement was not denied by representatives of railroads who were present, but it was stated that the railroads were willing to adopt any means for improving the sanitary condition of sleeping cars as soon as they knew what to do; that experiments were constantly being made, but thus far without result, so far as ventilation was concerned. No doubt the discussion will stimulate railroad authorities to adopt some means of improving the sanitary condition of their cars.

The report of the committee concerning the Army Canteen was also freely discussed, and the committee's resolution recommending that the canteen be reinstated was unanimously adopted, it having been shown that since the abolishment of the canteen the very evils which it had been intended to prevent had very materially increased, and that the abolishment had proved to be a great mistake.

Another matter of interest came up for discussion relative to the effect of lemon juice in the prevention of typhoid fever; the popular idea that this was an effectual preventive was denied by Dr. William F. Bissell of Buffalo, N. Y., who showed by extensive experiments that the agent had no effect whatever on the destruction of the typhoid bacilli.

The matter of special education for public health officials or health officers was considered, and resolutions adopted urging all medical schools in the country to provide for a chair of public hygiene, and it was also related that several institutions had been provided for for the purpose of especially educating sanitary officers, and conferring a degreee of Doctor of Public Health, but that no students had applied for admission.

Many other subjects, which it is impossible to refer to in a brief report like this, were considered at the meeting. The proceedings will be printed in book form, and will contain much valuable material for those interested in sanitary matters. The Association endorsed the movement for a Congress of Tuberculosis to be held in Washington in April, 1905, and the President of the Congress, Dr. Daniel Lewis of New York, announced that several distinguished foreign physicians, among them Prof. Koch, had signified their intention of being present.

Among the pleasant social features of the meeting was a reception given by President Roosevelt on the afternoon of Thursday, October 29th, and an excursion to Mt. Vernon on Friday afternoon, after the final adjournment. Havana, Cuba, was selected as the next place of meeting, and Dr. Finley of Havana was chosen President for the ensuing year.

U. O. B. WINGATE, M. D.

CURRENT LITERATURE.

MEDICINE.

W. H. Washburn, M.D., Jos. Kahn, M.D., L. F. Jermain, M.D., A. W. Myers, M.D.

Chronic Cyanosis, with Polycythemia and Enlarged Spleen; A New Clinical Entity.— OSLER (*Am. Jour. Med. Sc.*, Aug., '03) reports a group of cases which he considers a new clinical entity not hitherto brought before the notice of the medical profession. There are nine cases thus far on record. Two of these have occurred in Osler's personal experience. The notes of one case were furnished by Lowman of Cleveland and of another by Stockton of Buffalo. The remaining five cases have been collected from the literature. Of these, two are reported by Cabot, and one each by Vaquez, McKeen, and Saundby and Russell.

The notes on each of the cases are given in full. Osler gives an analysis of the clinical picture and symptoms which characterize the disease and give it a place of its own as a clinical entity. Cyanosis has been noted in all the cases. It has been remarkably chronic in character ranging from three or four to ten years. The blood-count has ranged from nine to thirty million. In the majority of the cases, however, it has been below ten million. The spleen was found enlarged in seven of the cases. Albumin was found in the urine of seven. Five of the cases had noticeable pigmentation of the skin. The symptoms have been varied, the chief ones being weakness, prostration, constipation, headache and vertigo.

Osler considers that our knowledge at present of the physiology of polycythemia is too meager to offer any discussion of the pathology of this group of cases. The clinical picture he considers distinctive but the symptoms are somewhat indefinite and the pathology quite obscure. (W. H. W.)

The Treatment of Severe Diabetes Mellitus with Oatmeal. PROF. CARL VON NOORDEN (*Berliner Klinische Wochenschrift*, Sept., 1903) reports five cases of diabetes mellitus in which, after the usual restricted diet failed to render the patients aglycosuric, a diet consisting chiefly of oatmeal, butter and simple albuminoids accomplished this. No other carbohydrates nor meats were allowed. At the same time that the amount of sugar was reduced, the acetone bodies and ammonia disappeared from the urine. Nearly one hundred cases were treated in this manner with varying results. The oatmeal is boiled for a considerable time in water to which salt and later butter and some vegetable albumin are added. The daily quantity used was 230 gr. oats, 100 gr. albumin, 300 gr. butter. The author cautions against all routine in the treatment of this disease; the individual and not the disease should be treated and although many of his patients were benefited by this form of diet others might be injured thereby. He is fearful of a repetition of the disastrous results which followed the routine employment of Winternitz's milk cure and Mosse's potato cure. (L. F. J.)

Albuminuria in Diabetes Mellitus.—ELLIOTT (*Jour. A. M. A.*, Aug. 8, 1903) states that albuminuria is of frequent development during the progress

of diabetes, over one-third of all cases manifesting this symptom at some time during their course. He divides it into two varieties, toxic and degenerative. The first is due to the presence of acid toxins in the blood and urine, which cause an irritation of the tubular epithelium with a resulting hyaline degeneration. It is generally of acute onset, arising in the later stages of the severe forms of the disease, is an invariable precedent and accompaniment of coma, and may be regarded as of the gravest prognostic significance. Toxic albuminuria with its associated renal changes, is the final determining cause of coma diabeticum, by producing a heaping up of sugar and toxins in the blood, through diminished permeability of the renal secreting structure. Degenerative albuminuria occurs with great frequency during the progress of the mild type of the disease, and is of renal origin and produced by a gradually developing nephritis, which arises from prolonged hyperfunction and impairment of renal nutrition. It is of little immediate significance, but of great eventual importance, as indicating the intrusion of chronic nephritis into the already manifold clinical difficulties.

A few cases of albuminuria in diabetes may be due to venous stasis from cardiac asthenia, and under such circumstances will be associated with other evidence of heart failure. Albuminuria in diabetes is never devoid of importance. It may be of the gravest significance, and it is always of sufficient import to receive the earnest attention of the clinician. (A. W.-M.)

Case of Henoch's Purpura.—ROMMEL (*Berliner Klinische Wochenschrift* Aug. 17, 1903) reports a case of Henoch's Purpura in a child three years of age. The case was marked by a purpuric eruption, articular inflammation, vomiting, severe abdominal symptoms, intestinal hemorrhage, colic and tenesmus. The mother of the child, who nursed it during its illness, also suffered from a mild attack of the same disease. Therapeutic measures with the exception of opium were of little or no avail. (L. F. J.)

Pneumonia and Pleurisy in Early Life Simulating Appendicitis.—GRIFFITH (*Jour. A. M. A., Aug.* 29, 1903) calls attention to the simulation of appendicitis or peritonitis by pulmonary processes, especially pneumonia and pleurisy. He reports 8 cases of this nature from his own experience and quotes many others from recent literature. In most of the cases the intrathoracic trouble was right sided, but in a few cases the left chest was involved; in some of them left sided pneumonia simulated appendicitis most closely. In some cases the delay in the appearance of the physical signs of pneumonia renders the diagnosis difficult.

Especial attention should be given to the following points: the sudden rise of temperature to 103 degrees or thereabouts, and the tendency to maintain this degree; the acceleration of the respiration, which is out of proportion to the pulse rate or the pyrexia; the relaxation of the abdominal walls between the respirations; the diminution or disappearance of tenderness on deep pressure with the flat of the hand; the possible presence of cough. In conclusion he urges the necessity for careful, repeated examinations of the chest. (A. W. M.)

THE WISCONSIN
MEDICAL JOURNAL

DECEMBER, 1903

SOME OF THE MORE MODERN VIEWS CONCERNING TYPHOID FEVER.*

BY JAMES B. HERRICK, M. D.,
Professor of Medicine in Rush Medical College,
CHICAGO.

With the discovery of the germ of typhoid, the conception of the disease has changed. Not only have the old pathological anatomical notions been modified and relegated to a position of secondary importance, but new diagnostic aids have been discovered, differentiation is more accurate, complications are more clearly understood, and therapy, while not yet specific, is at least more rational. Hematology bids fair to furnish us a specific remedy and to enable us to understand yet more clearly the chemical, cellular and molecular pathology of the disease.

I desire in this paper to present rather dogmatically and without reference to authorities, a few facts concerning typhoid that are comparatively recent, and from these to draw practical lessons. These facts I will touch upon briefly, though they are capable, each one of them, of extended elaboration. Perhaps all these facts are already known to you, yet a grouping of them and their consideration as a whole, may not be without interest and profit.

1. Typhoid fever is not a local intestinal disease. The portal of entry of the germ is in all probability the intestinal tract. But the ulcers are only a part of a general systemic process. The disease is a bacteriemia. The germs not only enter the blood, but probably multiply there as in a true septicemia, though this view is disputed by some who regard the germs found in the circulating blood during life as caught on their way while being carried from the foci in the intestine or spleen to other parts of the body. But whatever view

*Read before the Northern Peninsula Medical Society, at Sault Ste. Marie, Michigan, July 15, 1903.

is taken, it is important to realize that the intestinal tract has not the monopoly in the matter of typhoid germs, that they are in the circulating blood, and by the blood may be carried to all parts of the body, producing a toxemia as a result of the absorption by the tissues of the bodies of these bacteria.

The lesson to be drawn from this fact is that the old precautions against the spread of typhoid by drinking water and contaminated food ought in no respect to be ignored, for the germs undoubtedly gain entrance oftenest through the alimentary tract. The dissemination of the view that typhoid is a general and not an intestinal disease is liable to be followed by a misconception of the relation of the intestine to the disease. No changed notion as to the pathogenesis should result in any relaxation of prophylactic measures.

Again our views as to therapy must recognize that by the time symptoms of the disease have made their appearance the bacillus has passed the intestine and has entered the blood. Intestinal antiseptics, therefore, are powerless to touch the germs in the deeper layers of the intestine, the glands, the spleen or the blood. While not overlooking the importance of attention to proper diet and the condition of the bowel, and while not ignoring the value of antiseptics in lessening putrefactive changes in the bowels, modifying tympany, etc., one must not give drugs having an intestinal action and expect anything of a specific effect. The time to treat typhoid by intestinal remedies is days before ordinary symptoms appear, i. e., during the symptomless period of invasion and incubation. But this is, at present, an impossibility, because of our inability to recognize the disease at this stage.

2. Typhoid fever may exist without intestinal lesions. According to the older views this would be an impossibility. It would be typhoid without typhoid. Hamlet without Hamlet. But several cases are recorded where post-mortem examination has shown an absence of the intestinal changes, though the presence of the Eberth bacillus in the blood has borne out the clinical diagnosis of typhoid fever.

This fact will teach great care in the post-mortem decision as to the nature of a case clinically like typhoid, yet with the characteristic intestinal findings lacking. The bacteriologic examination must be made before typhoid is excluded.

3. Certain cases resembling typhoid are now known to be due to a closely related micro-organism commonly called the paratyphoid bacillus. Only careful and skillful bacteriologic examination enables one to distinguish the true typhoid from this paratyphoid bacillus.

It is impossible as yet to draw a clinical picture that shall accurately represent a paratyphoid infection and that shall sharply differ-

entiate it from a true typhoid. Yet, in general, it may be said that paratyphoid seems to run a shorter and milder course than the genuine disease, and the agglutination reaction with the true typhoid bacillus is not found when the blood serum of the paratyphoid patient is used, but is present with certain paratyphoid germs. Possibly some of our so-called abortive typhoids, and some of the cases of typhoid where the Widal test has been reported as negative, are instances of paratyphoid rather than true typhoid.

4. Many of the complications of typhoid fever are more clearly understood. Some, of course, may be due to secondary or mixed infections, as a pneumonia due to the pneumococcus, a cystitis or pyelitis due to the colon bacillus, a diphtheria, erysipelas or malaria due to the respective organisms of these diseases. But certain complications are clearly to be viewed in the light of metastases, localizations of organisms brought by the blood from a distant microbic focus; or, localizations of the organisms that are circulating and multiplying in the blood and find local conditions favoring their stopping at a certain point. Small numbers of the germs or unfavorable local conditions may induce no appreciable symptomatic change. Larger numbers and favoring conditions may make a focus of inflammation or of suppuration, for the typhoid bacillus is almost certainly a pus producer. We thus have explained to us the inflammation in the periosteum and bone, often a late complication. Parotitis, thryoiditis, mastitis, meningitis, encephalitis, otitis media, orchitis, prostatitis, have been observed where the typhoid bacillus has been responsible. Also abscess of the liver, kidney, spleen, and inflammations in such out of the way places as Bartholin's gland, the tear duct and an ovarian cyst are known. The lung, pleura or pericardium may also be involved, and thrombophlebitis becomes more readily understood when we consider that germs are constantly on hand to produce an inflammation of the vein walls. In some of these inflammations, as in the lung, a mixed infection is present, *e. g.*, typhoid bacillus with pneumococcus; in some subcutaneous and muscular abscesses not only the typhoid germ but others, as the staphylococcus, are there. Which was first is not always clear.

As a rule the prognosis of these inflammations due to the typhoid germ is good so far as the general manifestations are concerned. Their gravity depends in large measure on the local injury and the local disturbance of function. Naturally a typhoid meningitis or pericarditis would be more serious than a periostitis or an abscess of Bartholin's gland, but largely because of the more vital character of the part involved.

5. There are two complications so common and so important that they deserve special mention. These are typhoid infection of the gall-bladder and the urinary bladder, or perhaps one might say the bile and urine.

Typhoid bacilli are found in the bile in nearly all, or perhaps all cases of typhoid fever. In most cases no symptoms are present. In others a true cholecystitis develops with local pain, tenderness, and swelling. Two such cases with recovery without operation have come under my observation. Occasionally pus forms and may demand surgical interference. These facts would make this an important and interesting complication, but for another reason is it to be kept in mind. The cholecystitis with its increased shedding of degenerate epithelial cells lining the gall-bladder causes an increased amount of cholesterin to be present in the bile, and this, when deposited, perhaps about a clump of typhoid bacilli as a nucleus, is the starting-point of a gall-stone. This mode of origin of gall-stones from infectious cholecystitis has been clearly shown by Naunyn, and the relation of the typhoid bacillus to the cholecystitis has been worked out by many observers. So, in patients with symptoms indicating gall-stones, a knowledge of a recent typhoid might be of some help in the matter of diagnosis. A patient of mine whom I treated last fall for a severe typhoid and two relapses, has had, so I am informed, since his return east, two attacks of jaundice. This occurring two or three months after a typhoid is, to say the least, suspicious, and probably indicates gall-bladder mischief, perhaps stones. And it is interesting, too, because relapses are believed by some to be due to the germs remaining latent, though alive, in the gall-bladder (that they can do this for months has been proven) and then being poured out into the intestinal tract and setting up a new local and general infection. This patient of mine not only had these evidences of gall-bladder inflammation, but suffered two relapses.

Typhoid bacilluria is present in about one quarter of all typhoids. It is usually symptomless so far as complaint on the part of the patient is concerned, though occasionally a little burning sensation during micturition is complained of or there may be a frequency of urination —Curschmann's *cystitis typhosa*. In most of these cases the urine is slightly turbid from the enormous numbers of typhoid bacilli present, and there is often a little albumen. It is believed that little nests or foci of bacilli in the kidney have broken through into a tubule giving rise to albuminuria and to the presence and growth in the urine of the germs. Now, the importance of this complication does not lie chiefly in its danger to the patient, though danger of chronic inflam-

mation of the kidney proper, of its pelvis or of the bladder can not be overlooked, nor can we be sure that renal or vesical calculus may not at times be produced as a result of this inflammation. The greatest danger is that the disease may be spread by careless disposal of urine. The number of bacilli in a cubic centimetre of infected urine is far greater than in a similar quantity of typhoid fecal matter. The urine is less offensive and less plainly visible so that it will be less readily and naturally avoided. Soiled sheets or body clothing may easily, by contact infection, give rise to the disease in the nurse or any other attendant upon a patient. These germs remain for months or years in the urine and the danger from urinary pollution of drinking water can be clearly seen. This is a means of contamination of the water supply until lately entirely overlooked. Fortunately therapy is here efficient. Urotropin acts promptly in ridding the urine of typhoid bacilli. Fifteen to thirty grains a day for two or three days usually result in a disappearance of the bacilli. Occasionally they reappear and the drug has to be repeated. It is not a bad plan, therefore, in every case of typhoid during the period of convalescence to give urotropin for a couple of days. I say during convalescence, for that is when bacilluria is most likely to occur.

6. In diagnosis great help is obtained from an examination of the blood. Leucocytosis is absent in uncomplicated typhoid, a fact of considerable importance when one is called upon, as often happens, to differentiate between pneumonia, an appendicitis, a sepsis, and typhoid. Of the immense value of the Gruber-Pfeiffer agglutination reaction, commonly spoken of as the Widal test, I need say little. Its importance is generally recognized though the technic varies. One or two points, however, should not be forgotten. Unless dilutions of one to forty or more are used the results are uncertain, as normal blood serum in strong solution may produce a similar phenomenon with typhoid germs. Again, the reaction should always be controlled by tests with normal serum, and the culture should be fresh. Failure to get the reaction does not exclude typhoid. This is, I believe, the commonest error in the interpretation of the Widal test. It must not be forgotten that the agglutination reaction may not appear until late in the disease. I have seen it delayed until the 28th and again until the 35th days. It rarely appears until the second week of fever. One feels surest of one's ground when a negative Widal, say in the first week, is followed later, say on the thirteenth day, by a positive clumping and loss of motion. Here one has proof of the development of the specific blood change during the illness in hand and can rule out a change the result of previous typhoid infection. Absence of the

reaction, therefore, must not be regarded as conclusive evidence against typhoid, for the reaction may appear later. And occasionally it seems to be absent during the course of the disease. The possibility of the existence of a paratyphoid must not be overlooked in these cases of supposed typhoid that fail to give a positive Widal.

But there is another aid to diagnosis that bids fair, I think, to be of permanent and positive practical value. I refer to the direct examination of the blood for the typhoid germs. With scrupulous asepsis a vein at the elbow is punctured and five to ten c.c. of blood are withdrawn. Five to twenty drops, say fifteen, are put into flasks containing 100 c.c. of bouillon and then incubated. Smears can also be made and some of the blood allowed to stand so that serum for the Widal test can be obtained. Surprising results have followed this method. From a study of the results of Schottmüller and others, as well as those made by Ruediger in typhoid, and Rosenow in pneumonia under the direction of Professor Hektoen, one can state positively that the bacteriologic examination of the blood is harmless, nearly painless and gives early help in the diagnosis of these diseases. Even as early as the third day of the fever, in one of my patients with typhoid, the bacilli were found in the blood. They are found in the blood before the spots appear and before the agglutination reaction is present, disappear with the fever, reappear during a relapse. In short, this method seems to be the surest for making an early and positive diagnosis of typhoid fever. The cultivation of the germ from the feces is uncertain, from the spleen dangerous, from the urine positive in only twenty-five per cent. of cases and then too late to be of diagnostic value. From the rose-spots it is almost useless. From the circulating blood the test is sure and simple.

7. The importance of prophylaxis as regards polluted drinking water is well known, yet, strangely enough, not acted upon intelligently by communities. The scandalous condition of affairs at Ithaca, where intestinal discharges were draining directly into water that in a few minutes was to be used by people further down the stream for drinking purposes, is a sad commentary on the ability of the American community to put to practical use the more strictly scientific knowledge that is possessed by her investigators. Great reforms are necessary in our public health departments. Milk, oysters, and food contaminated by flies whose tastes incline them to visit with equal abandon the filthy privy vault or the army "sink," and then the choice food in the pantry or on the table of the millionaire or the soldier in his tent—these are sources of infection that must be dealt with practically.

The proper disposal of feces and urine from typhoids in the home

must be carefully watched by the physician. So, too, caution must be given regarding the sputum. Typhoid germs occasionally get into the sputum from typhoid bronchitis, laryngitis, pharyngitis, and pneumonia.

8. In treatment we are still waiting for a specific. Yet several lessons have been learned, and there is none I believe more important than that there is as yet no specific drug and that it is not necessary, because the diagnosis of typhoid is made in a given case, to fill our patient full of disagreeable, often harmful drugs. We hear less and less of "my treatment for typhoid." This formerly meant a routine drug treatment for every case, mild or severe. Rest, proper diet, hydrotherapy—best as tubbing—care as to the bowels, with symptomatic remedies cautiously employed when necessary, the patient being closely watched meanwhile for the occurrence of complications, such as hemorrhage, perforation, pus accumulations, failing heart, etc.,—this is rational. Some day a specific will be handed to us. We shall then be able to do for typhoid what we now do for diphtheria and malaria. In the meantime let us not be guilty of overdoing in the matter of treatment, not being therapeutic nihilists, but giving only when it is necessary and what we know is harmless.

SEMILUNAR CARTILAGES; THEIR ANATOMY AND SURGERY.*

BY H. A. SIFTON, M. D.,
MILWAUKEE.

The semilunar interarticular fibro-cartilages are two in number, an inner and outer, placed horizontally between the articular surfaces of the femur and tibia. In general outline they correspond to the circumferential portions of the tibial facets upon which they rest. Each has a thick, convex, fixed border in relation to the periphery of the joint, and a thin, concave, free border directed towards the interior of the joint. Neither of them is sufficiently large to cover the whole of the articular surface upon which it rests. The upper and lower surfaces of each semilunar are smooth and free and each cartilage terminates in an anterior and posterior fibrous horn. The internal semilunar fibro-cartilage forms very nearly a semicircle. It is attached by its anterior horn to the non-articular surface on the head of the tibia in front of the tibial attachment of the anterior crucial ligament. The external semilunar fibro-cartilage is attached by its anterior horn to

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 4, 1903.

the non-articular surface of the tibia in front of the tibial spine, where it is placed to the outer side and partly under cover of the tibial end of the anterior crucial ligament. By its posterior horn, it is attached to the interval between the two tubercles which surmount the tibial spine. This fibro-cartilage with its two horns therefore forms almost a complete circle. The two horns of the external semilunar are embraced by the two horns of the internal one and while the anterior crucial ligament has its tibial attachment almost between the anterior horns of the two semilunars, the tibial attachment of the posterior crucial ligament is situated behind the posterior horns of the two cartilages. Both cartilages possess other attachments. The external semilunar sends a large bundle of fibers to the posterior crucial ligament. Both semilunar cartilages are attached to the deep surface of the capsule and by some short fibrous bands to the circumference of the tibial head, these fibers being known as the coronary ligaments. The two cartilages are bound together in front by a transverse ligament which stretches between their anterior margins. In studying the semilunar cartilages, nearly one hundred joints were examined. Great variation was noticed in the size and thickness of the cartilages in different knees. Considerable difference is often found in the two knees of the same subject. The cartilages are always loose and can be moved backward and forward and laterally through a range of probably a quarter of an inch, although the amount of mobility is very difficult to determine owing to the hardening of the bodies that were preserved and to the changes that take place in the tissues soon after death in the subjects that were examined fresh. The thickness of the cartilages varied very greatly. In some subjects they were thick and narrow, leaving a considerable portion of the head of the tibia exposed, while in others they were broad and thin, covering a large portion of the head of the tibia. The external cartilage was always broader and covered a greater portion of the head of the tibia than the internal. In two instances, the internal semilunar was found rudimentary, being represented only by a narrow band on the inner surface of the capsular ligament. The attachment of the circumference of the cartilages to the head of the tibia by the so-called coronary ligaments is often deficient, the coronary ligaments being represented in most cases by but a few fibrous strands. The so-called transverse ligament was found present in but half the subjects examined. In studying the relations of the cartilages to the blood supply of the knee, a goodly sized artery was usually seen to follow the circumference of the cartilage immediately beneath its lower edge. These arteries come from the inferior articular and are more constant in relation to the

external cartilage than to the internal. These arteries are often sufficiently large to bleed freely if wounded and if divided while operating may be difficult to reach owing to their position inside the capsule and the limited space available for manipulation.

The cartilages are said to act as wedges, helping to maintain the bones and other structures about the joint in proper position. This is probably correct, but if the cartilages by any means become loosened from their attachments so that it is possible for them to be caught between the opposing surfaces of the joint as it is brought into full extension, they will act as a foreign body locking the joint and causing injury to its surface or to the cartilage.

Various diseases like tuberculosis which affect the knee joint destroy the semilunar cartilages along with the other structures. However, it is not our purpose, in this paper, to consider anything but injuries.

The cartilage is usually injured or displaced by a fall with the knee partly flexed and rotated. In this position, the force of the fall is brought to bear directly on the cartilage. Occasionally the cartilages are displaced by direct violence. In severe injuries, one or both ends of the cartilage may be torn loose. It is, however, much more frequent that the circumference of the cartilage is torn loose from the capsular ligament or that the cartilage is split in its long direction by being caught between the ends of the bone. Sometimes what would appear to be a very slight injury will tear the cartilage loose. It has been stated that a cartilage that has not been displaced may be injured by an unusual movement of the joint, causing inflammation and thickening of its inner edge, thus simulating a displaced cartilage. It is also possible that a loose fold of synovial membrane may get caught between the bone ends and produce all the symptoms of a loose cartilage. This has been found on several occasions when the joint was opened.

The symptoms that are produced depend upon the nature and severity of the injury. If the cartilage is simply displaced, destroying only a few of its attachments, the difficulty will often be mistaken for a sprain. The distinctive feature, however, will be tenderness confined to the line of the attachment of the cartilage. If the displacement is outwards, the cartilage will be found more prominent than normal. If the displacement is inwards toward the cavity of the joint, there will be a depression corresponding to the position of the cartilage. The knee will usually be locked in a position somewhat short of complete extension. This locking of the joint and inability to quite extend it is almost always present in injured or displaced cartilages. We do not, as a rule, find this condition in any other

injury to the joint, except in case of a floating body, which is practically the same as a loose cartilage. Often the most careful examination will reveal no evidence of injury, the joint being apparently normal, but, still, owing to the fact that a part of the cartilage is torn loose and gets between the articular surfaces, the patient finds it impossible to put any weight upon the leg. The joint is usually slightly swollen and if the limb is used, the swelling increases.

The treatment of injuries or displacement to the semilunar cartilages may be divided into that which is appropriate for cases seen immediately after the first occurrence of the injury and those in which the displacement constantly recurs. Under the first condition, the cartilage should be reduced if possible. Of course, if the cartilage is divided or torn loose from its end attachments, it will be impossible to replace it by any form of manipulation, but if it is only dislocated, it can readily be replaced by fully flexing the knee, rotating it outwards or inwards and then quickly extending it. If the cartilage is prominent, pressure should be made on the prominent point while manipulations are being carried on. An anesthetic is seldom necessary. Any form of splint which will give the knee absolute rest should then be applied. After a week this splint should be removed daily for careful massage and passive movements. The attachments of the cartilage unite very slowly and failure in the treatment is usually due to insufficient time allowed for complete union to take place. It requires from eight to twelve weeks for the cartilage to become fixed after the first injury. A certain proportion of the cases, under any form of treatment other than the removal of the cartilage, will not completely recover. This will be the case in the injuries which tear loose the ends of the cartilage or split it longitudinally or transversely, as the cartilage will constantly get out of place on the slightest provocation, thereby locking the joint and producing all the symptoms of the original injury, although usually in a milder degree, as the joint acquires immunity to the traumatism. Under these conditions no palliative treatment, in my opinion, is worth considering. Elastic knee bandages and braces of various kinds have been recommended. They are all worthless. Permanent relief can be obtained only by operative measures, completely removing all detached or loose portions of the cartilage. It is useless to attempt to fix the cartilage or any part of it by sutures, and it is wholly unnecessary for the reason that complete removal of the cartilage in no way damages the joint providing it is properly done. In opening the knee joint for this or any other purpose ,the greatest possible care should be taken to prevent infection. Only under perfect aseptic conditions is it allowable. The

knee joint will not bear the amount of traumatism or take care of the number of germs that the peritoneum or other large serous cavities of the body will. This lack of immunity to infection is probably due to its scant vascularity in comparison with the other serous cavities.

After the knee joint has been opened, the amount of pain suffered varies very much in the different patients, some having but little pain, others suffering greatly. I am inclined to think the amount of pain will be directly in proportion to the amount of injury to the synovial membrane that is produced by the necessary manipulation.

The best form of incision for the removal of a semilunar cartilage is U-shaped with the convex border towards the patella. Turning the flap down to the required extent, the joint is opened by a transverse incision above the upper surface of the cartilage. This incision should be made as far above the cartilage as possible for the reason that there is an artery of fair size immediately beneath the lower border which might be wounded if the incision were made close to the cartilage. I believe that the U-shaped incision of the skin and overlying tissues is far preferable to a straight incision for the reason that it divides the resulting scar into three parts and is consequently more flexible than if all the tissues had been divided in the same line. If the incision is carried well forward it will not be necessary to interfere with the lateral ligaments, ample room being obtainable by running the incision well forward. By retracting the patella and manipulating the joint, a good view of one-half of the knee is easily obtained. As above stated, I would not recommend under any circumstances an attempt to suture the cartilage, but would remove all the detached portion. This can best be done by a strong, narrow-bladed scissors. I think no fluid should be introduced into the joint unless considerable hemorrhage has been encountered, and it becomes necessary to wash out blood or clots which have accidentally obtained access to the cavity. The rule which should always be followed is to produce as little traumatism as possible to attain the object necessary. The joint should be closed by a continuous fine catgut suture and the skin incision then closed. The limb should be put at rest by means of a plaster dressing for two weeks, at the end of which time, the wound being entirely united, gentle manipulation of the joint is commenced, the patient being also allowed to bear some weight upon the leg.

I have been able to find but very scant literature on the subject of injuries to the semilunar cartilages, nor could I find a report of a case in which both cartilages of the same joint had been removed. My study of the nature and structure of the cartilages leads me to believe that they can be removed without damaging the function of the joint.

To make more clear what has been set forth in this paper, I report two cases which have recently come under my care.

C. E., medical student, 21 years of age, while wrestling, fell, with his leg twisted under him, injuring his knee. He walked home with but little difficulty. The next morning he was unable to walk. The knee was but slightly swollen and could be flexed and extended with but little difficulty. There was some tenderness over the inside of the knee, but not severe. Rest in bed with the use of liniments, etc., was tried for a few days without effect. He went about on crutches for four weeks with his knee bandaged. It was then placed in a plaster dressing and kept immobilized for two months before he was able to use it. At the end of two months more, he was able to walk without support. About two years after the first injury, he again injured the knee while playing base ball. He was immediately unable to walk a step, although the swelling and tenderness about the knee was slight. It was placed in a plaster dressing at once and in about two months he was able to walk without support. Within a year, he again injured it while putting on his trousers. It was again immobilized and it was all of four months before he was able to use it. From this time on there was always a feeling of uncertainty about the knee. About six months after the last injury, while walking across the road, his knee suddenly became locked and he was unable to walk a step. Examination next day showed it to be slightly swollen. Flexion was practically normal, but it could not be fully extended. The joint was not tender with the exception of a spot over the middle of the internal semilunar cartilage where there was slight tenderness. The knee joint was opened and the semilunar cartilage found torn from its attachment to the capsular ligament throughout the greater part of its length, leaving it attached by its two ends only. It was rolled into a very hard, cord-like band that caught between the articular surfaces of the joint when the knee was fully extended. The loose cartilage was cut away from its attachment and removed. The joint was at once closed and the leg dressed in plaster for two weeks, when the wound had completely healed. Within three months the function of the joint was perfect and as soon as the atrophy of the muscles, which resulted from the long periods of confinement, had been overcome, he was able to play base ball on the university team.

Mrs. C., age 45, while lifting a tub of water, accidentally fell, the tub tumbling upon her in such a way as to twist her knee under her. She says she felt something give way in the joint. The joint was very much swollen and she was unable to use it for two months, after which time she gradually began to walk. About six months after the first injury she slightly wrenched her knee, which became locked and exceedingly painful, so much so that she fell injuring the arm on the opposite side. After this she was always in dread of the knee becoming suddenly locked. I saw her about a year after the first injury. The joint was slightly swollen and tender over the inside. It could be put through all normal movements. In fact, outside of the slight swelling and tenderness, it appeared to be perfectly normal. The knee joint was opened and the internal semilunar cartilage was found to

be torn from its anterior attachment. The end curled up and floated around in the cavity of the joint. The detached portion and about two-thirds of the circumference of the cartilage was cut away and the joint closed in the usual way. A perfect result was obtained.

Discussion.

DR. LEVINGS, Milwaukee—I have been very much interested in this excellent paper of Dr. Sifton's and I feel myself under obligations to him; and I believe the society is also under obligations to the doctor for bringing this subject before us, because we have not fully and upon all occasions understood this injury. The loosening or the displacement of a semilunar cartilage or cartilages (it is very seldom that both are displaced) is predisposed to in part perhaps largely by the construction of the joint. The knee joint is not a perfect hinge joint by any means. In flexion and extension it undergoes a certain degree of rotation—rotation outward in flexion, rotation inward in extension, and this rotation is attended with a certain degree of gliding motion of the condyles of the femur upon the head of the tibia, and consequently upon the semilunar cartilages. The cartilages are also very loosely attached to the head of the tibia. They do not cover, as the doctor has well stated, the entire articular surface, but only its outer portion. They are attached pretty firmly anteriorly and posteriorly, but at the side by means of the coronary ligaments, only slightly. Often in consequence af this loose attachment, because of the rotation and sliding of the joint, as the result of a sudden, perhaps unexpected movement, these cartilages are torn loose, either in part or in whole, from their attachments, roll up in the joint between the articulating surfaces, give the patient terrific pain, lock the joint, and produce a condition of acute synovitis.

Now there are two conditions from which this injury should be differentiated, one is loose bodies in the knee joint, floating cartilages so-called, which are often also due to an injury, may come from a blood clot, may be due to the breaking of an osteophite, may be due to the breaking off of a portion of the cartilage or a portion of the cartilage and bone. It may come in cases of osteoarthritis; but there is this peculiarity about floating bodies: they produce locking of the joints as do detached semilunar cartilages; but they are constantly appearing and disappearing, constantly making their appearance in new places, at one time upon the inside of the patella, then upon the outside, in front and behind, a condition which never occurs in displacement of the semilunar cartilage. A semilunar cartilage always produces its trouble in the same place, and that place can very often be readily determined. If the cartilage is displaced outward you can feel it, if displaced inwards there is a depression. I had a patient who displaced the external semilunar cartilage, and this is but rarely the case, for nearly always it is the internal cartilage which is displaced; she could see and feel a distinct lump or protuberance directly over the outside of the joint and above the head of the fibula. If the cartilage is displaced there is an area which is always sensitive, and if the cartilage is rolled inwards there will be a vacancy and if displaced outwards there will be a node. The other condition with which displaced semilunar cartilages may be confounded is a sprain.

Now I desire to make this point: These cases I believe have been mistaken for and treated as sprains—they have not been understood—at least very often has this been the case. A person gives the knee a sudden wrench,

he feels a snap, and something give way within the joint, there is terrific pain, the joint is locked, it becomes swollen, there is effusion and synovitis, it is treated for a sprain—no finer diagnosis is made. The knee is bandaged and put at rest for a week or ten days and the patient recovers; but after two or three weeks or a month there is again a second slight inadvertent movement while the limb is in a state of flexion and the same condition recurs—another snap, a crack, a protuberance, the joint becomes locked, and synovitis supervenes with decided swelling. This condition recurs over and over again. Now this is not the history of a case of sprain. You seldom get the snap, you never get the locking of the joint, you never get a protuberance, a node or a vacant place at the site of the cartilage; and you never get a certain area which is always sensitive even when the joint is practically not inflamed. I think then there should always be a distinct effort made to differentiate the loosening of a semilunar cartilage from an injury or strain of the ligaments, or of the synovial membranes, or of all the structures of the joint combined, and also from floating bodies in the joint.

DR. SIFTON—Sir William Turner speaks of cases in which the semilunar cartilage apparently is not displaced at all, but where the inner edge of it becomes swollen and thickened by some form of traumatism; it seems to me that this point is well taken. However, the fact that the semilunar cartilage is not greatly displaced from its normal attachment, being simply caught between the articular surfaces of the joint, does not warrant us in saying that the attachments are not torn loose at all. The distinction is really unimportant. If the inner edge of the cartilage gets caught in the slightest degree, you may properly call it a displaced cartilage.

DISSECTING ANEURYSM OF THE AORTA WITH A REPORT OF A CASE*.

BY JOHN L. YATES, M. D.,
Assistant Demonstrator in Pathology,
University of Pennsylvania.

Dissecting aneurysm of the aorta has always been of such infrequent occurrence that the discovery of one post-mortem is apt to excite more than a passing interest, though perhaps more particularly in the minds of pathologists. However, if necropsies were more generally done, especially in cases of sudden or fairly sudden death, or if those examinations that are made were more carefully carried out, the condition would be more frequently discovered. Moreover, the clinical recognition of this lesion is always so manifestly difficult and so frequently impossible, that text books are apt to give it but scant attention. There are but two recorded cases in which the diagnosis was made during life and later confirmed by an autopsy. This is part-

*From the Pathological Laboratory of the Johns Hopkins Hospital.

ly due to the fact that insufficient attention is given to the clinical history without which it is practically impossible to arrive at the correct conclusion.

It is the object of this report to call attention to the fact that the diagnosis is quite possible in certain instances as well as to record the following case.

Jane R., colored. Age unknown (probably considerable over fifty). Unfortunately no clinical history had been taken. She had been admitted as a pauper to the Bay View Hospital (Baltimore) and up to the afternoon of her death had been in fairly good condition. She then complained of a feeling of weakness and of sharp abdominal pains and was immediately transferred to the medical department. The medical staff was extremely busy at that time, and as she was in no apparent need of immediate treatment and had become quite comfortable, her examination was delayed for more urgent work. Shortly afterwards while sitting quietly by her bed she suddenly cried out and fell forward unconscious, dying quietly within a few minutes.

The following notes were taken from the post-mortem record. Death, Feb. 6, 1902. Autopsy, Feb. 8, 1902. The body was that of a much emaciated old woman. There had been complete destruction of the nasal septum with exposure of the bony palate on the nasal aspect. The buccal surface was quite normal.

The *peritoneal cavity* contained a small amount of blood-stained fluid. One loop of small intestine was found adherent to a small firm mass lying upon the vertebræ a short distance above the brim of the pelvis. The serous surfaces were otherwise normal. A large hematoma lying in the tissues behind the ascending colon and in the transverse mesocolon extended from the cecum upward and transversely almost to the mid-line of the body. So intimate was the relationship of the hematoma to the large intestine that they were readily dissected out together and remained adherent. The cause of the hemorrhage was not recognized at this time and the exact location of the leakage was not determined. The impression was obtained that the bleeding began in the region of the cecum and that the blood had followed upward in the path of least resistance. The clot became progressively smaller as the dissection followed it upward. The *pleural* and *pericardial cavities* were normal. The heart was considerably hypertrophied eccentrically (weight 550 grams). Both the aortic and mitral valves were slightly thickened but not evidently incompetent. Fatty and fibrous changes were present in the myocardium.

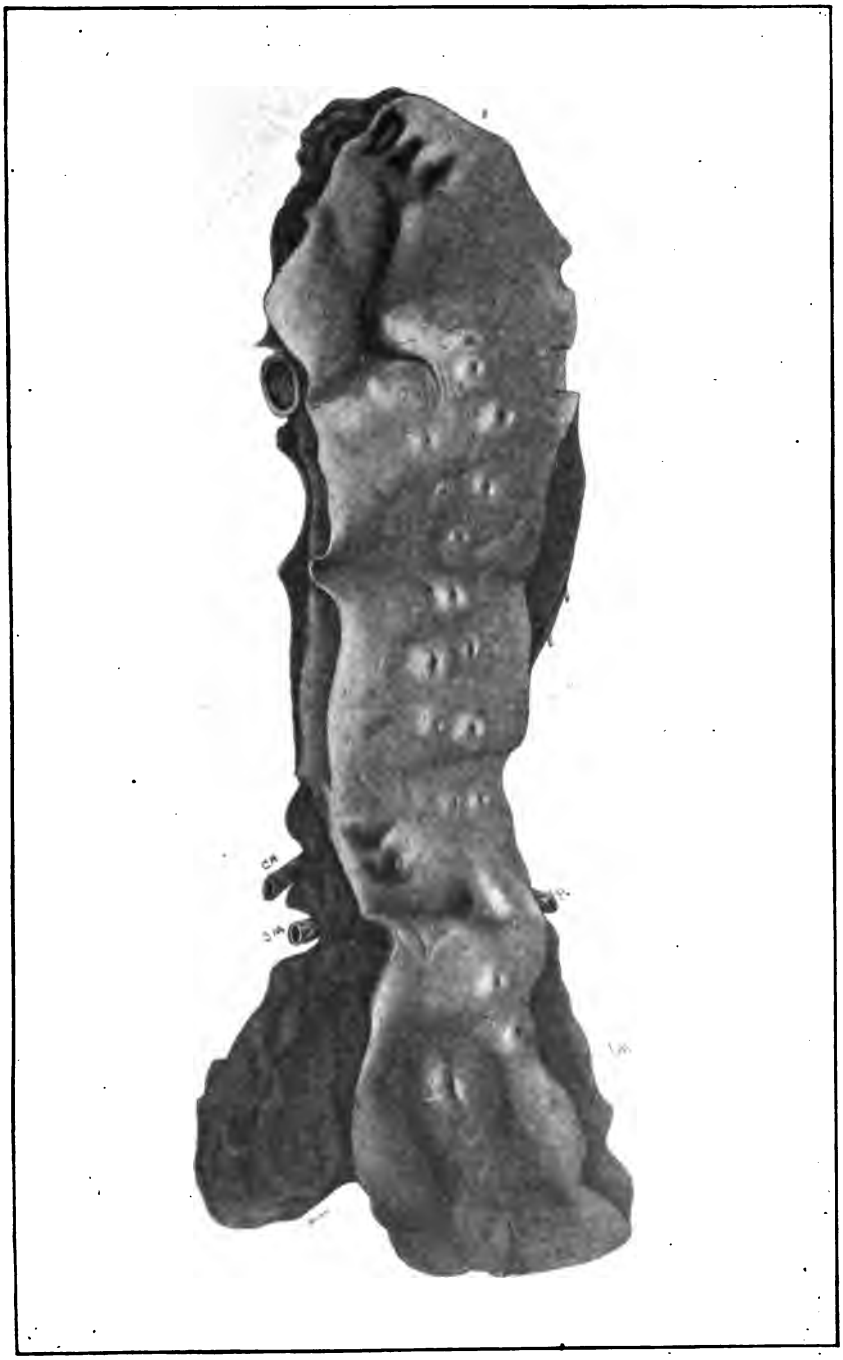
The *lungs* were slightly congested and there was considerable hypostasis. The *spleen* was small and soft with numerous fibrous adhesions between it and contiguous surfaces. The cut section appeared normal. The *liver* surface was puckered and scarred with numerous irregular white plaques scattered here and there in the capsule. On section the surface was pale, somewhat mottled, and the lobulations were indistinct. The *kidneys* were small, the capsule slightly adherent and the superficial vessels injected. A cut section revealed an abnormally thin cortex with distinct striations and easily visible

glomeruli. The *gastro-intestinal* canal was quite normal throughout. The *genitalia* were atrophic but otherwise normal.

The *aorta* was of normal size and shape. Widespread but irregular changes were present over the entire intima. These consisted for the most part of areas of slight thickening, yellow in color and evidently containing considerable fat. There were also numerous fibrous and hyaline nodules particularly about the orifices of the smaller branches. A few of these had become superficially calcareous but none were ulcerated. These plaques and the more diffusely thickened areas were surrounded by narrow and likewise irregular strips and areas of fairly normal looking intima.

Beginning at a point 7 mm. below the septum separating the common carotid and subclavian orifices was the upper end of a laceration in the intima. This extended downward in the direction of the axis of the aorta for 35 mm. ending with a fairly sharp turn towards the left just above and to the right of the orifices of the first pair of intercostal arteries of aortic origin. The upper or proximal 15 mm. of the laceration ended in the tissues of the media. The margins were slightly everted but were firmly adherent to the base which was quite smooth and apparently covered with endothelium. Throughout the distal 20 mm. the margins of the lacerations while still smooth and everted were separated from the deeper structures. At first the dissection extended but a short distance laterally from the torn edges, but in the lower portion of the laceration it broadened abruptly to involve about three-fourths of the entire circumference of the aorta. Proceeding downwards the separation extended up to and in places inside of the line of the right intercostal orifices. On the left side it remained well outside this line. At the level of the inferior pair of inter-costals the aneurysmal channel became rapidly narrower and passed between the right of this pair and the orifice of the cœliac axis, reaching just to the base of the latter. It then began to widen again, involving the right half of the base of the superior mesenteric. Continuing to widen as it extended downward, the channel completely encircled the right renal artery but the left was uninvolved. 14 mm. above the orifice of the inferior mesenteric a still greater widening took place so that the aneurysm here involved all of the wall of the aorta but the narrow strip included between the orifices of the lumbar branches. The conditions here underwent a sharp change. The anterior wall was transformed into a sacculated aneurysm 30x30x28 mm. in size and from the sac sprang the inferior mesenteric artery. On the right side the dissection ended with this sac but on the left it was continued down along the anterior wall of the common iliac as an intra-mural hematoma.

The cavity of the aneurysm throughout the aorta was usually smooth and was apparently lined with a membrane similar to endothelium. Upon this new formed membrane were scattered nodular thickenings identical with typical scleroses in appearance. In certain angles and recesses there were larger and smaller thrombi. Nowhere were the walls found shaggy as seen when the media has been artificially separated. The walls varied in thickness and it was often quite impossible to distinguish just where the separation had occurred. At



DESCRIPTION

The broken lines show the limits of the dissection, areas marked (d) being over the aneurysm. The circle about (An) indicates the limits of the sacculated aneurysm.

C. A. Cœliac axis. S. M. Superior mesenteric artery. R. Left renal artery. I. M. Inferior mesenteric artery. C. I. Left common iliac artery.

the level of the fifth and sixth pairs of intercostal orifices the wall was the thinnest, possibly consisting of adventitia alone and from this area there had been some slight extravasation of blood into the surrounding connective tissue but no actual rupture or hemorrhage.

The sacculated aneurysm was in itself quite remarkable. Its true walls were thin and consisted only of the outer walls of the dissecting channel but this had been reinforced by a typical laminated thrombus which had become quite thick. As there was no evident communication with the natural lumen it was not apparent why this sacculated aneurysm had developed upon the dissecting aneurysm just at this place until it was found that the inferior mesenteric artery had become separated at or close to its origin and arose practically from the sac of the second aneurysm. It seemed quite likely that the orifice of the inferior mesenteric, which remained patent, had allowed a current of blood to be forced outwards against the outer wall of the dissecting aneurysm and thus weakened it enough to produce dilatation. This sac formed the retro-peritoneal mass to which a loop of intestine had become adherent.

The small posterior branches from the aorta were for the most part normal, a few possibly had come to originate from the aneurysm, none showed any evidence of having had the dissecting process extend along them. The coeliac axis was not involved. The dissection had separated the anterior half of the walls of the superior mesenteric. This dissection did not extend along the branches first given off, but followed the main stem. At the termination of the traceable dissection (as well as it could be followed in the excised tissues) a secondary opening was present through which the blood in the false lumen had flowed back into the general circulation. The source of the hemorrhage that produced the hematoma found along the colon was not discovered. The walls of the right renal artery were completely dissected but only for a short distance from its origin. But one ovarian artery could be found and this was normal. Aside from apparently having its origin in the sac of the second aneurysm the inferior mesenteric vessel was unaffected. It was not determined how far the thrombus extended downward in the wall of the left iliac.

The *microscopic examination* of the organs revealed nothing particularly noteworthy. The sections from the aorta showed that the dissection had taken place for the most part in the outer layers of the media but had in one place almost if not quite reached to the adventitia. The lumen of the aneurysm was lined by a layer of flat endothelial-like cells. Next to this was a stratum of rather cellular connective tissue that contained numerous plasma cells and fewer polymorphonuclear leucocytes. These cells were principally in the tissue of the adventitia and were mainly lying in a zone parallel to the outer layer of the media. The media, aside from a very limited deposit of lime salts, was apparently normal away from the immediate vicinity of the aneurysm. The iliac section showed an old thrombus that was undergoing organization and there was no evidence of an attempted formation of an intima. The dissection in the superior mesenteric branch had taken place in part between the media and adventitia and here again there was a definite endothelial-like lining

of the false channel. The arteritis was comparatively more advanced in the smaller vessels.

Pathological Diagnosis: Chronic dissecting aneurysm, probably with external rupture. Retroperitoneal hematoma; syphilis; arteriosclerosis; chronic nephritis; dilatation and hypertrophy of the heart; secondary sacculated aneurysm.

There is abundant evidence that the lesion was of some duration, viz.: the various processes of repair, the development of arterio-sclerotic changes in the new formed intima, the thickness of the thrombus in the secondary aneurysm and the fibrous adhesion of intestine to it. This appearance of changes simulating endarteritis in the new formed intima of the aneurysm channel is most striking and unusual, apparently indicating that the compensatory process reproduces so accurately the structures of a normal vessel that the type of subsequent degeneration is the same in both.

There is every reason to suppose that the sclerotic changes in the aorta had progressed materially since the occurrence of the dissecting process, which was evidently of approximately the same duration throughout, excepting perhaps the portion involving the left common iliac branch. It is surprising that but one small secondary opening had taken place through which the blood re-entered the normal channel.

From what follows it will be evident this case is complete but for the history of onset; the age, probable occupation and syphilis giving all the requisite etiological factors.

All writers on the subject are of the opinion that the separation in the arterial walls usually takes place in the tissues of the media and remains there until secondary rupture has occurred. Experiments which have been undertaken to determine the nature of the primary laceration and the location of the subsequent dissection have been practically identical in their results. Pennock found that interstitial injections of the wall of an aorta produced a separation in the media. Peacock lacerated the inner and middle coats, and after ligating the cut ends and branches of the aorta injected water into the lumen under some pressure. He found that when the intima and media had been completely torn through so that the fluid was limited by the adventitia alone there was invariably some leakage externally. From this he concluded that clinically the primary tear did not completely penetrate the media. Bostroem from similar experiments and pathological observations found that the tear may extend only through the intima or partially or completely through the media and the subsequent dissection take place mainly in the media.

In life the primary tear results from a sudden increase in blood

pressure acting upon an abnormal wall. This abnormality may be due to a loss in elasticity in the media in consequence of dilatation (Schrötter) or result from moderate sclerotic changes. As would be expected the majority of these lacerations occur near the heart where the intra-vascular pressure is highest. They are next most frequent and almost equally common near the orifice of the innominate and just beyond that of the subclavian. Beyond this they become progressively less frequent the farther they are from the heart. Tears near the heart are commonly transverse and usually involve one-half to two-thirds of the circumference (Kelynack). Those beyond the subclavian tend to be longitudinal. They may be angular.

In order to have dissection follow there must apparently be some condition present that renders the tissues of the media unusually separable, because post-mortem observations have shown that lacerations may heal completely without any dissection and, as Adami has pointed out, "atheromatous ulcers are as common as dissecting aneurysm is rare."

Bastroem and Schrötter both maintain that age stands in no casual relationship to this lesion, and the former has noted the absence of advanced sclerotic changes in the post-mortem findings. On the other hand, Adami emphasizes the constancy of some slight changes. Peacock's figures show that 91% of the affected individuals are over 30 and in only 3.3% of the cases were the aortæ described as normal. In those rare instances occurring in young individuals there was present a dilatation of the vessel which suggests some abnormality. If one will take a series of aortæ and observe the relative ease with which the walls may be split and torn apart or separated by interstitial injections after the method of Pennock it is impossible to escape the conviction that the examples with moderate diffuse sclerotic changes are the most readily separable. The advanced forms of sclerosis with nodular thickening particularly when calcified are very resistant, some being practically inseparable at these areas. The cohesion between the strata of the media is also greater in the younger or more normal vessels. Examined macroscopically these tears appear to be exclusively in the media.

After the dissecting process has once begun it may extend with great rapidity for variable distances in either direction from the primary tear, *i. e.* towards or away from the heart. Kelynack has based a satisfactory classification of these aneurysms upon the result of this dissection.

1. A collection of blood within the tissues of the vessel wall (Eppinger's intra-mural hematoma).

2. Secondary rupture extra-vascularly.
3. Secondary rupture intra-vascularly so that the blood re-enters the normal lumen.

The great majority of all cases belong to the second of these groups (150 of 178 cases collected by Bostroem). Among these are found all those cases where death follows immediately or soon after the inception of the lesion and includes all cases in individuals below 35.

The nearer the primary tear is to the heart the greater the liability to external rupture. Ninety of these 150 cases ruptured into the pericardium, the rest involved the pleural and peritoneal cavities and the perivascular tissues. In only eighteen of the 178 cases did the secondary rupture take place into the lumen of the aorta or its branches. These openings may be single or multiple (in which case Bostroem thinks they are formed simultaneously) and be distal or proximal to the first tear. The formation of these communications between the true and false lumens has some limiting influence on the extent of the dissection which in one case reached as far as the popliteal artery.

The process of repair where life is prolonged is by the organization of the intra-mural thrombus effected by the blood vessels of the intima (Adami) or by a growth of endothelium to line the false lumen in cases where the secondary rupture is intra-vascular. This growth probably results mainly from a proliferation of the endothelium pre-existing at the margins of the tears. These forms of long duration have been called chronic, arrested, repaired, healed and advanced by various writers. Bostroem is of the opinion that they are always associated with secondary openings into the true lumen and that after this communication has been established subsequent rupture externally rarely, if ever, occurs. He has also observed the false lumen to assume the characteristics and functions of a normal vessel. This condition has as a consequence of this fact, been repeatedly mistaken for a malformation—double aorta.

As resultant complications sacculated aneurysms may develop from the true but more often from the false lumen. The aortic branches can arise from either lumen with or without the dissecting process extending into their walls. When the origin is from the aneurysm the original aortic orifice may become obliterated. The smaller branches are more apt to spring from the aneurysm, the larger are more prone to suffer from the dissecting process involving their walls.

The subsequent effect upon the individual is variable. Death may result from rupture externally as was possibly the cause of the fatal hemorrhage in the case reported above. In a case recorded by

Prescott a fresh dissecting process occurred which ruptured into the pericardium. Most frequently there is quite a rapid development of cardiac hypertrophy, arterial sclerosis and nephritis. This last is particularly progressive if the dissecting changes interfere with the renal blood supply.

The etiological factors from a clinical standpoint as well as the symptoms can almost be reduced from the known pathological conditions. Dissecting aneurysm affects principally individuals of late middle life, but may occur in the comparatively young or very old (17-95). It is more frequent in males than in females, but relatively more frequent in females than the sacculated form. Conditions and occupations leading to vascular degeneration and high blood pressure, particularly when associated with liability to trauma and sudden severe exertion, are the principal predisposing elements.

Hunt studied the clinical histories of his own and reported cases and found certain common symptoms. Following some traumatism or sudden exertion in an individual who may have been quite well hitherto, there is a sudden onset of pain in the chest often radiating to the back or abdomen. This is frequently worse on the left side and may be associated with a sensation of something having given away internally. The pain is as a rule severe and may be followed by unconsciousness. There is usually a temporary recovery even in the rapidly fatal cases. Recurrent attacks of slight pain may occur. There is no sense of constriction in the chest nor pain extending down the arm as in angina.

Subsequently there usually follows a rather rapidly progressive development of symptoms of heart disease: edema, dyspnea and palpitation. Murmurs over the cardiac region and extending along the aorta may be present.

The prognosis in any case is grave. The majority die immediately or within a few hours. When the so-called healed form develops life may be prolonged somewhat. Cases lasting 8 and 22 years are on record, but it is more frequently a matter of as many months.

In conclusion it may be said that in about 90% of all cases of dissecting aneurysm death follows soon or less commonly immediately after the occurrence of the lesion. In these instances the diagnosis is seldom possible and perhaps but rarely justifiable. However, the condition might be suspected if consequent upon some severe physical strain or some sudden exertion that would cause a material increase in the blood pressure, as an attempted recovery after a mis-step, or if following an injury producing considerable bodily compression there should occur the characteristic onset followed by a few hours' improve-

ment which ended rather abruptly in a rapidly fatal attack of dyspnea. In the remaining 10% of the cases the initial conditions and symptoms are similar but the subsequent improvement is greater and more permanent though attacks of pain may recur. Later, and generally within a few months, symptoms of rapidly advancing idiopathic cardiac insufficiency develop with the usual attendent phenomena but perhaps unusually pronounced signs of renal changes.

If the character and etiological significance of the onset could be recognized by the clinician the correct diagnosis would probably be more frequently made.

REFERENCES:

Pennock: Case of an anomalous aneurysm of the aorta resulting from effusion of blood between the laminæ composing the middle coat of the vessel. *Am. Journ. Med. Scien.*, vol. xiv, 1863, p. 13.

Peacock: Report on cases of dissecting aneurysm. *Trans. Path. Soc. Lond.*, vol. xiv, 1863, p. 87.

Bastroem: Das geheilte Aneurysma dissecans. *Deutsch. Arch. f. Klin. Med.*, Bd. xlii, 1888, p. 1.

Schrötter: Aneurysma dissecans. *Nothnagel spec. Path. u. Therap.*, Bd. xx. Th. 3 Hft. I Abth. II p. 325. 1900.

Kelynack: On dissecting aneurysm of the aorta. *Edinburg Med. Journ.*, vol. iv, (N. S.) 1898, p. 162.

Adami: Upon arrested or repaired dissecting aneurysms with the report of two cases. *Montreal Med. Journ.*, vol. xxiv and xxv, 1896, pp. 945 and 23.

Hunt: A case of dissecting aneurysm and rupture into both pleural cavities. *Trans. Clinical Soc. Lond.*, vol. xxx, 1896, p. 200.

Prescott: Chronic (or healed) dissecting aneurysm of the aorta, accompanied by an acute dissecting aneurysm with rupture into the pericardium. *Journ. Boston Soc. Med. Scien.*, vol ii, 1898, p. 134.

SIGNIFICANCE OF PERFORATING WOUNDS OF THE EYEBALL*.

BY JAMES A. BACH, M. D.,
MILWAUKEE.

Perforating wounds of the eyeball have ever been considered as of more than ordinary importance. The frequency and the serious results often following such wounds would entitle them to a closer study and observation than is accorded them in our textbooks. The general physician no less than the specialist is interested in these injuries, as it is to him that patients first apply, as a rule, for counsel and help. A great deal depends upon these preliminary treatments, since they frequently determine the ultimate outcome of the case.

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 4, 1903.

Many eyes are lost owing to an insufficient understanding of the indications to be met in treating these wounds and their consequences. Aside from a possible intra-ocular infection of a defenseless tissue, there remain many elements of even greater importance to be considered. The intra-ocular injuries, in these cases, are of greater importance, as a rule, than the perforating wound itself, especially if the perforating injury is located outside of the pupillary field, near or behind the limbus of the cornea. The danger of injury to the lens is always great in these wounds. Even more often it happens that not only the lens, but the ciliary body and iris as well are involved, which later complicate the case in a great degree. This is not only true of the immediate effects of such wounds, but the prognosis for ultimate recovery in these cases becomes very poor indeed, even though the wound be quite aseptic. Besides this, there is the great danger of incidental detachment of the intra-ocular structures with excessive hemorrhage. The retina and choroid may be detached, the lens dislocated or broken up, the vitreous escape to be replaced by blood or serous exudate. Prolapse of the intra-ocular structures often follows these wounds, and the importance of this must not be overlooked. Of the significance of these complications I will speak later.

We well know that although perforating wounds are exceedingly dangerous, yet if made by design and properly located the eye surgeon may, with perfect impunity, and without endangering the welfare of the eye, make any number of these wounds. In the operation for cataract and iridectomy and other operations, the eye receives extensive perforating wounds and yet the healing of these wounds restores the eye to comparative comfort and health. Experience has shown that the eyeball has zones or areas where aseptic wounds are well borne, and it also has zones where such wounds are liable to be followed by the most dire consequences. The great danger zone on an eyeball is the zone lying about a quarter of an inch behind the limbus of the cornea, extending completely around the cornea. This zone Dr. Nettleship has very properly designated as the great danger zone of the eyeball. Intra-ocularly and located in this zone, we find the very life center of the eyeball: the ciliary body, which is attached here. Anteriorly to this, we find an extension of practically the same tissue, the iris, and posteriorly, the choroid, also of similar construction. We also find here that wonderful series of channels, the mechanism of which allows of the proper circulation, not only of the nutritive fluids, but also of the return circulation of the intra-ocular fluids. Intra-ocular secretions take place here, in short, it is the zone of greatest intra-ocular activity, and any interference with it is liable to be fol-

lowed by the most unpleasant consequences. It is especially an injury of this zone that has so often resulted in sympathetic ophthalmia and ultimate blindness. The ciliary body, though largely muscular, is yet the great nutrient body of the interior of the eye and its structures. The nutrition can not be carried directly by bloodvessels to the various transparent media, as this would entail localized opacities. The ciliary body, iris and choroid, constitute the great storehouse, and from this the nutrition to all the transparent media is drawn by a process of absorption, not only in health but in disease as well. The amount of exudate thrown out as a result of an irritation due to injury of the ciliary body is more than sufficient to repair its defect; the excess being carried over to distant injured parts in the course of normal healing without undue irritation. The ciliary body, iris and choroid, collectively called the uveal tract, with its nutrient and nervous supply for the various surrounding media, resent an injury far more than do other structures. The anterior portion of the uveal tract is largely composed of muscle, surrounding and pervading which we have an abundance of blood vessels, lymphatics, the various drainage canals and the compound nerves of the ciliary group. The iris, which represents the forward extension of the uveal tract, is but loosely suspended in the anterior chamber and has great freedom of action; injury of this structure is relatively safe if the irritation be not kept up too long, as might be the case in prolapse or synechiæ. The choroid, or the posterior portion of the uveal tract, is in most respects like the ciliary body and iris, but has no muscle fibres and its terminal nutrient vessels and nerves are not as abundant. An injury to the choroid is in itself not followed by as serious consequences as an injury of either the iris or the ciliary body. One may with impunity puncture the choroid with a very sharp knife without any bad results, provided the ciliary arteries, which pass forward in this membrane, are not too much destroyed, nor the wound infected. A similar wound in the ciliary body might ultimately prove fatal to the eye. I have examined a number of eyes that had ultimately been lost or rendered useless and painful and a result of perforating wounds of the eyeball near the region of the ciliary body, and found invariably, not only more or less prolapse of the several tissues, but firm adhesions and contractions of these tissues about the wound. These adhesions were in every case far more extensive than the outer wound might suggest, and were evidently the result of an extensive outpour of plastic exudate in the ciliary body, incapacitating its own function as a muscular as well as a nutrient organ, through the contractions that followed. Besides this, these contractions had induced in

most cases detachments of the retina and choroid. The uveal tract, with the ciliary body as its vital center, furnishes all the reconstructive pabulum in intra-ocular injuries, hence a wound inflicted in penetration of the ocular structures with the incidental irritation, (especially if the ciliary body be involved), will invite a flow of exudate far in excess of the needs for the repair of the wound of the uveal tract, and this excess, as will appear, becomes the destructive agent of the eye. Exudate of reconstructive pabulum, though necessary and desirable in the healing of wounds, in the case of the ciliary body becomes both a healer and a destroyer. Especially is this true in perforating wounds of the eyeball, associated, as they usually are, with considerable irritation due to laceration, contusion and prolapse. If a clean cut wound be made through any portion of the uveal tract, avoiding as much as possible injury to surrounding structures, the healing process is associated with but a moderate amount of exudate and may not be enough to do much harm, being deposited right at the wound. Let such wound, however, be inflicted by some dull instrument, or by a foreign body, such as a splinter of wood or a piece of iron or stone striking the eye, the contusion and laceration following such perforating wounds of the eyeball, even without infection, will invite an outflow of exudate so abundant that even distant portions of the ciliary body are liable to become infiltrated and upon organization completely tie down and contract this important structure and later induce detachments. The uveal tract is not only the source of nutrition for the intra-ocular media, but it is also a conductor and protector to all the vessels and nerves that it holds in its meshes. A free and complete system of anastomosis of the various channels as well as of the nerves must be maintained in the meshes of this organ to assure health and nutrition to the eye. The contractions following the organization of plastic exudate which may have infiltrated the ciliary body or its extensions, will completely choke and destroy its function, and with it, its own internal nutrition as well as the nutrition of the eyeball.

It is for this reason that such wounds are so often followed by shrinkage of the eyeball and total loss of vision; and if the irritation to the ciliary nerves due to the tying down by exudate becomes great, even the fellow eye may suffer through reflex ciliary irritation, and in exceptional cases may become the prime cause inducing sympathetic ophthalmia. The nearer the ciliary body and the more this body is involved, the more liable are such results to follow. A simple plastic inflammation of the ciliary body may bring about the same results and for the same reasons.

It will be evident from the above that the greatest danger from

perforating wounds of the eyeball is not found in the wound itself, unless it is infected, but must be looked for in the process of repair and healing. It is true, the wound may and often does destroy the eye either by inducing detachments of the internal structures, by infecting the eyeball, by tearing and dislocating the lens or by inviting extensive prolapses. Yet most of these complications can be remedied. The lens if torn, can be removed; prolapses, of whatever nature, can generally be corrected or removed; internal hemorrhages absorb; but an extensive and infiltrative exudate will invariably destroy the eye and if allowed to occur, can not be remedied. Such eyes often come to us after extensive exudates have taken place. It is then indeed difficult to save such an eye from complete destruction as the ultimate contractions will surely destroy the very important function of nutrition of the uveal tract as well as the internal secretion and proper circulation of the various fluids in the ciliary body and uveal tract generally.

As stated above, sympathetic ophthalmia may and often does follow as a result of these plastic contractions and the consequent irritation of the ciliary nerves which course so freely in the anterior portion of the uveal tract. Even without apparent infection of the injured eye, sympathetic ophthalmia has frequently been reported as a result of reflex ciliary irritation in the uninjured eye. This was the old theory of sympathetic ophthalmia until Deutschmann and his following had apparently proven that an infection only could induce, either directly or indirectly, a sympathetic inflammation in the uninjured eye. Late investigations, however, again question Deutschmann's conclusions, and the adherents of the old theory, somewhat modified, are gaining in number. Clinical experience has shown Deutschmann's theory untenable in some respects and it is being more generally accepted that the great and prime factor in the induction of sympathetic ophthalmia is reflex ciliary irritation. It is true, that as a result of this irritation, the vitality of the injured as well as of the uninjured eye is materially lowered and an infection more readily brought about. It is, as a rule, only the eye which develops excessive plastic exudate that is so liable to induce sympathetic symptoms, and these exudates, as stated above, we get in those severely injured eyes as a normal consequence of the injury of the vital center of the uveal tract, even without infection. The eyes which become generally infected inducing a more or less purulent intraocular inflammation, rarely invite trouble for the fellow eye. I have never seen sympathetic trouble follow as a result of a purulently infected eye. In three instances, however, I have observed the development of sympathetic

ophthalmia in the uninjured eye as a result of an apparently non-infected punctured wound of the injured eye. These three cases had a similar history. I will here briefly state the history of one of them as an illustration.

The 6-year-old daughter of J. N., living near Beaver Dam, Wis., was referred to me by Dr. Voorhus, of Beaver Dam, on account of her eye which had been injured two months previously. The little girl had the mishap to fall from a chair while holding a pair of scissors in her hand, and when she struck the floor one of the blades of the scissors struck and penetrated her eye, passing through the ciliary body. The wound at the time was dressed by Dr. Voorhus and the case seemed to progress well enough and in the course of a few weeks had healed so that only the scar was visible. At no time was there any evidence of infection or disturbance in the healing process. It was about two months after the injury had occurred that I saw the case. At that time I found the eye slightly irritable but not painful. A very slight congestion of the eye followed exposure to the air and lachrymation was at such times free. Intra-ocular examination showed general plastic deposits and contractions. The anterior chamber was shallow, the pupil was tied down at different points to the underlying structures, and the eye had slightly decreased in size with prolapse of the ciliary body. There was but very little sight left in the eye. The process of plastic contractions had apparently not run its course and greater changes were in progress. The eye had every appearance of ciliary irritation and I advised the immediate removal of the eye as the only safe procedure in order to avoid danger to the uninjured eye from sympathetic ophthalmia. This the parents of the little girl promptly refused, as the child had so little discomfort and the eye looked so well to them. A few months later the mother came to my office with this little girl, begging me to remove the eye so as to restore the uninjured eye, which in the meantime had become involved in a plastic inflammation, exactly like that of the injured eye. Nothing could be done; the child became totally blind as a result of sympathetic inflammation.

The other two cases had histories like the foregoing: perforating wounds without apparent infection, prompt healing, but associated with an excessive outpouring of plastic exudate in the anterior portion of the uveal tract to be followed after a few months by a similar inflammation in the fellow eye, bringing about total blindness. These three cases are now at the school for the blind at Janesville. It is to be noted that the sympathetic trouble did not follow until a few months after the injury and not until the plastic exudate had become well organized and contracted, impinging upon the numerous ciliary nerves found in the ciliary body.

Without wishing to point out any special treatment for this class of cases, I would yet make the observation that in all accidental perforating wounds of the eyeball all possible sources of ciliary irritation

ought to be speedily removed so as to lessen as much as possible the stimulus to the outpour of plastic exudates. Prolapses ought to be promptly and aseptically removed. Atropin should be dropped freely into the eye. If possible, a cataractous lens or foreign body in the eyeball must not be allowed to remain and induce destructive irritation and exudation. Every means must be used to reduce irritation as speedily as possible, for if the process of exudation is allowed to proceed for even a few days all our after-treatment may not avail, and the prompt removal of the eye may become necessary.

Discussion.

At the close of reading his paper, Dr. Bach said:

It had seemed to me that a subject of such importance would be of interest to the society because cases of this kind occur in almost everybody's practice, and it has been my experience that such cases often go by default; and often present themselves when adhesions and contractions have taken place, when possibly the timely use of a little atropin or antiseptic precautions might have been of inestimable benefit. Immediate attention to such conditions as present themselves after perforating injury of the eyeball, becomes necessary. It is not possible, frequently, to send such a case away, and if the general practitioner does not interest himself in the case, in an intelligent manner, promptly meeting the conditions as they may arise, he lays himself open to severe criticism. A more general discussion of this subject before the society might have been expected.

PROSTATECTOMY.*

BY T. W. NUZUM, M. D.,
BRODHEAD, WIS.

Prostatectomy is one of the newer operations, and one that has attracted very great and widespread attention during the past two years. It casts a bright light in a dark corner which had not heretofore been illumined.

Prostatic obstruction usually falls upon a class of men who have been energetic and intellectual and have accumulated a competency with which to spend declining years in comfort, when suddenly, they discover that they have an ailment which has hitherto proven incurable, and in which the catheter renders only temporary relief, and carries in its wake that which sooner or later will produce urethritis, orchitis, prostatitis, and cystitis, one or all, and finally, nephritis and death.

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 4, 1903.

I remember when a student, Prof. Hyde said that the catheter was no more trouble than the glasses on his face. How differently we look upon catheter life at the present time, since its dangers are more fully realized. We now realize that the man who has to rely upon the catheter to evacuate his bladder, is doomed, and that his few remaining years are full of peril and suffering.

Anatomy. The prostate gland is a pale, firm, glandular body, situated in front of the rectum and behind the pubes. Normally it is 1½ inches in its transverse diameter, 1 inch in its antero-posterior diameter, ¾ of an inch in depth, and weighs 6 drams; pathologically, it may be much larger. It is held in position by the pubo-prostatic ligament, posterior layer of the deep perineal fascia, and levator prostatæ muscles.

It is composed of two lateral lobes and one middle lobe and is enclosed in a firm fibrous capsule. The urethra perforates the prostate anterior to the center, one-third being in front and two-thirds behind the urethra. The prostatic urethra is crescent-shaped and the verum montanum bulges forward into the urethra, thus closing it. Through this latter, the ducts from the prostate and the seminal ducts empty into the urethra, the mucus lining of the urethra being continuous with that of the ducts, so that in removing the prostate the floor of the urethra is usually torn away.

The prostate gland is composed of muscular and glandular tissue, the muscle being of the unstriped variety and continuous with the muscle fibers at the neck of the bladder, so that it cannot be readily separated from below, but extends upward onto the bladder like a cuff, and can be easily separated from above downward (Murphy). The principal blood vessels run along the central portion, and this part should be avoided during the early part of an operation, as the hemorrhage clouds the field of operation and very materially interferes with the work.

Physiology. The prostate secretes a milky fluid which mixes with that from the seminal vesicles and increases the motility of the spermatozoa, and has been demonstrated as essential for fecundity. It is claimed to have some power as an accessory sphincter to the bladder, but this is disputed by Murphy, who says "it is rather an accessory to the sexual function than to the urinary apparatus."

In deciding which is the preferable route by which to remove the prostate gland, certain surgical principles should be considered. First, the one by which the prostate can be most readily reached. Second, the one where the work can be performed under the eye and not wholly by touch. Third, the one most devoid of danger. Fourth, that which

gives the least possible suffering to the patient and confines him to the bed for the shortest possible time. Fifth, the one that gives the best functional results: *viz.* (a) complete emptying of the bladder, (b) sphincter control, (c) freedom from pain and too frequent urination. Sixth, the results must be lasting.

I think that the majority of the profession are becoming fairly well agreed that these indications are best fulfilled by the perineal route, though many still cling to the combined method. There seems to be but little doubt that the supra-pubic route has advantages in certain cases, if we could determine the cases definitely before operating, but this seems to be impracticable.

Parker Syms says, "the supra-pubic method though formerly extensively practiced in this country, has fallen very deservedly into disrepute. It is entirely unsurgical, as it makes an incised wound in the anterior part of the bladder, a lacerated wound in the posterior part, and two pockets with open lymph spaces, and blood vessels which are immediately filled with septic urine and where the drainage is up hill, and therefore inadequate. The field of operation is distant and the gland must be taken away by morcellation—hemorrhage is profuse, and one is obliged to operate by the sense of touch." He has abandoned this route because of its disadvantages and of its great mortality from (a) shock, (b) hemorrhage, (c) sepsis.

Dr. Alexander H. Ferguson reports 50 cases done by this method with 33⅓ per cent. of deaths. Dr. J. B. Murphy has abandoned the operation by this route. The Bottini operation has proven unsatisfactory, as the improvement in very many instances is not lasting, and it is an operation done in the dark and not devoid of danger. Dr. Belfield (*Progressive Med.*, Dec., 1902) says "The Bottini resurrection has been followed by virtual re-interment of this unsurgical procedure, though it still finds a few advocates. It is now generally recognized that the cases in which the Bottini operation scores its greatest success can be benefited without the dangers incident to this operation; while as a standard measure for the relief of prostatic hypertrophy in general, it has no pretentions whatever."

Castration and resection of the vas deferens will cause atrophy of the prostate in many instances, but fail to relieve the obstruction because the third lobe, which produces the obstruction, fails to atrophy.

The following case is an illustration:—C. L., age 66, veteran of the Civil War, blind and almost deaf, had suffered for many years from prostatic obstruction and for some time from ulceration of the bladder. The catheter and irrigation were his only relief. Prostate very large and hard. I made a supra-pubic cystotomy and removed a section of the vas deferens and drained the bladder for one year.

The patient did splendidly, improved in general health, and the prostate atrophied until the lateral lobes were small and thin, smaller than the usual size, and still he was powerless to pass his urine *per vias naturales* until I removed his prostate by the perineal route after which he recovered his lost function and the fistula closed.

I directed the following set of questions to a number of prominent surgeons and have received instructive replies.

First. How many prostatectomies have you performed? Second. How many fatalities and from what cause? Third. How many cured? Fourth. Your choice between the supra-pubic and perineal routes? Fifth. The most extreme age at which it is advisable to operate?

Dr. William Monroe, of Boston, makes the supra-pubic operation and drains the bladder for from one week to one month and then makes a median perineal prostatectomy. He reports 14 cases operated in this way, with no fatalities and all cured or very materially relieved.

Eugene Fuller, reports over 200 cases. In the beginning the fatalities were about 10 per cent. and now about 5 per cent. Losses due to arterio-sclerosis. He says "in a slight majority of cases I remove the obstruction by way of the perineum. In a large minority of instances I find it far safer for the patient, and better in regard to prognosis, to do the supra-pubic operation. I consider the operator who tries to do the perineal operation in all instances, deficient in this field of surgery. It is rare indeed for one of my cases not to recover with a satisfactory result." He has operated at 81 years of age and secured a fine result, and advises an operation at that advanced age, in emergency, to relieve pain.

Dr. Senn says, "I have a decided preference for the perineal route. The operation should be done before cystitis complicates." He always makes the inverted Y incision and opens the bladder and drains.

Dr. A. J. Ochsner, of Chicago, reports 37 cases of prostatic hypertrophy operated upon. On 7 he did vasectomy and of these 4 were cured, 2 improved, and one died. Three combined supra-pubic and perineal prostatectomies; 2 were cured and 1 improved; six supra-pubic cystotomies: 1 cured and 5 improved; one supra-pubic prostatectomy, died; four orchectomies: 2 cured and 2 died; nineteen perineal prostatectomies: 18 cured and one died of uremia.

Dr. Roswell Park, of Buffalo, reports 12 prostatectomies: 10 recovered with good results and 2 died of exhaustion and septic infection. He says, "I prefer the combination of supra-pubic incision, without opening the peritoneum, and perineal semilunar flap through which to make the prostate accessible."

Dr. J. A. Stealy, of Freeport, reports 3 cases of prostatectomy, all cured. He says, "my oldest patient was 76 years of age. If there are no contra-indications I should not hesitate to operate at from 76 to 82."

Dr. Alexander Hugh Ferguson, of Chicago, reports 29 cases done by the median perineal route: 28 cured; 1 died from general debility and renal insufficiency. He prefers the median perineal route and has

operated at 81, 83, and 83 years and nine months of age. He says farther: "I have discarded the Bottini operation on account of (a) fatality, (b) temporary results."

Prof. Parker Syms, of New York, reports 22 perineal prostatectomies with no fatalities: 21 cured of prostatic obstruction; 1 improved. He says, "I consider supra-pubic cystotomy as a very dangerous operation in these cases; I recognize no age limit and depend upon the physical condition of the patient, and regard operation by my method as being much safer than repeated catheterization."

Prof. J. B. Murphy, of Chicago, reports 28 prostatectomies with no deaths attributable to the operation. One died four weeks after operation from pneumonia; one of hemiplegia five weeks after operation, and one, 80 years of age, of uremia, in the third week after operation. His results have been uniformly satisfactory, except in one case, where the patient still complains of pain in passing urine. He has given up the supra-pubic route entirely and does only the perineal.

Dr. A. I. Bouffleur, of Chicago, reports 6 cases of prostatectomy, no fatalities, all cured. He says "the supra-pubic route is indicated only when the enlargement extends into the bladder. The prostate can be reached with much greater ease from below and the treatment can be much more rationally applied." His oldest patient was 74 years of age. He says, " cystitis and sepsis are not contra-indications to the perineal operation as drainage has a very salutary effect upon the condition. If the operation is resorted to when obstructive symptoms first begin, it should be as free from mortality as the removal of a stone from the bladder, and the recovery should be as prompt and enduring as from that operation."

Prof. Levings, of Milwaukee, reports 11 cases of perineal prostatectomy without a fatality, all cured. He says, "in my opinion there is everything to recommend the perineal route in dealing with the enlarged gland." His youngest patient was 60 and the oldest 88 years of age. He says, "I believe that the age limit is not so much to be considered as the condition of the vessels and the general state of the patient."

Dr. E. Evans, of La Crosse, reports 5 cases: 3 done by the supra-pubic route and 2 by the perineal; 4 cured and 1 died of uremia.

Dr. Albarran (*Progressive Med.*, Dec., 1902, page 195) reports 14 prostatectomies without a death.

Dr. Jackson, of Madison, reports 12 cases done by the various methods with 50 per cent. of losses due to uremia and sepsis. He prefers the perineal route but thinks there are cases where the supra-pubic or combined methods are sometimes better. He says, "the age limit depends more upon the individual than upon his actual years. With organs, heart, kidneys, arteries, etc., in good condition, I think operations done quickly are often well borne by old people." As contra-indications may be mentioned: advanced age, moderate obstructions, arterio-fibro-sclerosis which is always accompanied by nephritis, history of antecedent dissipation, pulmonary, cardiac and other defects.

Number of reports of prostatectomies collected: 255. Cured 230, or 90 per cent.; improved 12, or 4 per cent.; died 18 or 7 per cent..

Number of supra-pubic operations reported: 110. Died 18, or 16½ per cent.

Number of combined supra-pubic and perineal operations reported: 24. Died 2, or 8 per cent.

Operations. I believe the most practical operation thus far is the one described by Murphy and practiced by Ochsner and perhaps a majority of surgeons, with some slight changes in the technic.

After the usual preparation, the patient is placed in the lithotomy position, a horse-shoe or inverted Y incision is made from between the nates and anus on one side, to the fold of the scrotum and around to the opposite side from the point of beginning. With one finger in the rectum and a sound in the urethra, the rectum is dissected entirely free from the prostate.

With a sound in the bladder the prostate is pressed down and held by an assistant, one lobe of the prostate is grasped with a vulsellum or cats-paw forceps and drawn down and incised parallel to the median line, after which this lobe is shelled out and cut off. Then the other lobe is treated in a similar manner and lastly the middle lobe is shelled out. Should the lobes not shell out from the capsule, as sometimes happens, they may be removed in pieces by morcellation. The hemorrhage may be arrested by forceps, hot pads, or, as Prof. Bouffleur does, by packing around the large perineal tube (which is now introduced into the bladder) iodoform gauze saturated with adrenalin chloride solution 25 per cent., with sterile water: the wound is now closed, except the left angle, from which the tube protrudes, and the tube is stitched to the skin with silkworm gut sutures. The dressings are applied and the patient is placed in bed in the semi-sitting position, which should be maintained for 72 hours as this favors drainage. Artificial heat should be applied and one pint of normal salt solution (warm) should be given per rectum every two hours, until urine flows freely. The patient should be given some urinary antiseptic and the bladder irrigated with boracic acid, permanganate of potash, or some other mild antiseptic solution, from one to four times a day. The drainage tube should be attached to a long tube which is allowed to empty into an antiseptic solution. The patient should be urged to change his position frequently and he is allowed to sit up on the fifth to the seventh day.

Prof. Hugh A. Ferguson passes one finger into the rectum, and, with a long bladed knife, makes a median incision into the prostate and splits the capsule, then passes the front finger into the wound, and pulls back the capsule and with a pair of long retractors, with a lip on the end, he draws apart the edges of the wound and capsule. He then proceeds to bite away the prostate with his specially devised morcellator, using the finger as a guide. With the finger in the bladder he searches for any bar or projecting lobe and, if found, removes it in the same way. He then irrigates with a copious amount of very warm water (120°) to arrest hemorrhage, introduces a drainage tube,

around which he places a little iodoform gauze, closes the wound, except where the perineal tube projects, and applies the dressings. The operation is done by Dr. Ferguson in the most easy and skillful manner and his results have been ideal, but the work is done so much in the dark that I fear one less skilled might not meet with the same degree of success.

Prof. Parker Syms has devised an operation in which he makes a median incision down to the membranous urethra and splits it in its entire length to the prostate. He then dilates the prostatic urethra and introduces his prostatic retractor (which consists of a rubber bag on a hollow tube) closed into the bladder and distends it with water or air. With this he draws the prostate down well into view, splits the capsule crosswise, and shells out the gland with the finger. The rubber bulb produces pressure and controlls hemorrhage. He then introduces his perineal drain into the bladder and lets it protrude through the upper angle of the wound, packs the lower angle and the space from which the prostate is removed, with iodoform gauze. This he changes every day, substituting a smaller amount each time. He attaches a long tube to the perineal drain and lets the water run into an antiseptic solution, and irrigates the bladder many times a day by syphonage. This is easily done by raising the vessel containing the solution, the long distal end of the tube being first introduced into the irrigating fluid, and then lowering it. He claims for his method: First, the work is done under the eye, and is therefore accurate; second, there is very little loss of blood; third, it is quickly and easily done; fourth, all the urine escapes through the tube and does not soil the patient, nor in fact the wound, until the tube is removed on the fifth or seventh day, when strong granulations will have formed and the danger of sepsis has practically passed.

Conclusions:—First, prostatectomy is an operation which is destined to add many years of comfort to many patients. Second, the perineal route is the one which is giving far more cures and fewer fatalities than any other, and is being practiced with greater frequency by leading surgeons. Third, the operation is warranted in men of advanced age if there is no other contra-indication. Fourth, preparatory treatment for some days or weeks is to be recommended in septic cases as it very materially increases the chances of the patient's recovery. Fifth, the horse-shoe or inverted Y incision is more generally practiced than the median, and gives a better opportunity for doing the work under the eye. Sixth, the most danger to the patient arises from sclerosed arteries and hemorrhage. Seventh, considering the age of the patients and the magnitude of the operation, the results have been marvelous and the mortality very small. Eighth, with improved technic and greater experience the mortality will be farther reduced.

Case No. 2. N. F., age 65, a slender, frail man; water has passed slowly for 15 years. Two years ago was obliged to use the catheter for some time and had the prostate milked after Belfield's method, which gave some relief, but has been troubled quite severely all the time. Two weeks ago was taken suddenly and severely again. Could not pass

any water and suffered severe pain; some rise in temperature, blood and mucus in the urine. Prostate very large and extends across the pelvis; very difficult to pass the soft rubber catheter. Oct. 14th, after the usual preparation he was placed in the lithotomy position and a large horse-shoe incision was made from between the rami of the pubes and anus on one side, up to the fold of the scrotum and down to the same point on the opposite side. With a finger in the rectum and a sound in the urethra I carefully dissected the rectum from the prostate and then, with a sound in the bladder, the prostate was forced down and held by an assistant; the right lobe of the prostate was brought down and held by a cats-paw forceps, the capsule was divided and the lobe shelled out with some difficulty, after which the left lobe was brought down in like manner; this and the central lobe shelled out easily. Hemorrhage was profuse and was controlled by forceps and hot sponges.

Some hemostatic forceps were left on for 24 hours. A large drainage tube was placed in the bladder through the perineum and secured by stitching to the skin with silkworm gut sutures. A soft rubber catheter was placed in the bladder and secured in like manner. The wound was packed with iodoform gauze and closed. Hemorrhage was quite free for a time, but the patient made a fine recovery. He returned home at the end of 5 weeks in fine condition, passing all his urine per urethra. The wound in the perineum closed. Some two weeks later he was seized with a chill and suffered pain on micturition until a hard lump was felt in the urethra which, upon being removed, I found to be a calcareous deposit upon some abrasion in the bladder. Had this remained it must have formed the nucleus of a stone. The patient is now enjoying good health.

Case No. 3. B. Z., age 72, widower, has had childrens' diseases. Six years ago water stopped and he was catheterized; no further trouble except frequent and slow micturition until two years ago, since which time he has been obliged to use the catheter much of the time, and for the past two months, all of the time. He has suffered from cystitis and repeated attacks of epididymitis in each testicle. Father died at 79 years of age from tumor and mother at 68 from lingering consumption. One brother has diabetes. Physical examination: temperature 98°, pulse 72; very thin and pale, heart normal, lungs normal, testicles hard and very large, right larger than the left; lower portion of the epididymis very much indurated. Prostate moderately enlarged, more on the left side than the right. After careful irrigation for ten days with boracic acid and permanganate solution, the usual preparations were made and the patient was operated upon by the method described in the former case, except that all was removed by morcellation. All bleeding vessels were ligated, a large perineal drain was secured in place and the patient returned to bed.

He is now passing all his water by the usual route, and is making a good recovery.

Discussion.

DR. D. J. HAYES, Milwaukee—When one considers the lamentable condition of a man suffering with chronic prostatic obstruction—a man, who by

hard work and good management, has acquired a competence by which he expected to spend his declining years in pleasure and comfort, and is attacked with this disease, the most distressing and painful maladv that has ever afflicted mankind, and when we further consider that twenty-five per cent. of all men after the fifty-fifth year of life suffer more or less from hypertrophy of the prostate (and we all expect to live to be old men) the excellent paper presented by Dr. Nuzum this afternoon is quite timely.

In the past years nothing more was attempted in prostatics than to alleviate the suffering of its victims. For the past fifteen years, a crusade has been in progress to combat this disease and it has at last found a reasonably safe and scientific method in perineal prostatectomy.

I desire to draw your attention to one point that was not fully brought out by Dr. Nuzum's paper, and that is, what time in the evolution of the disease is most favorable for prostatectomy.

In order to answer this question intelligently it will be necessary to refer briefly to the pathological conditions induced in the urinary tract by the obstruction. The normal prostate weighs six drachms and the prostatic urethra measures about one and one-half inches in length. As the gland enlarges it carries the prostatic urethra with it, and the length is increased to three, four and sometimes five inches and the weight from six drachms to several ounces.

The internal vesical orifice is elevated behind the symphysis pubis and now not being located in the most dependent part of the bladder, residual urine is a necessary consequence. The residual urine increases from month to month and year to year, and the time will surely come when retention of urine will take place and the catheter must be used, and now the trouble begins. If infection of the bladder does not take place with the first catheterization, it is almost certain to follow later. We have first cystitis, then hypertrophy of the bladder from over-work of that organ, the same as we have hypertrophy of the heart from valvular disease. In some cases, we may have sacculated bladder or atony of the same organ. Extension of inflammation in the direction of the kidneys, causing pyelitis and pyelonephritis and finally death. This is the logical course of all cases of obstruction in the urethra from any cause unrelieved. Obstruction with a moderate cystitis, and complete demoralization of the higher portions of the urinary tract are the two extremes that cause patients to present themselves for the relief of prostatic obstruction. Are we justified in standing idly by long after the catheter, bladder irrigation and other palliative measures have failed to give relief, and see the patient suffer and die?

The logical conclusion is that the operation should be performed after palliative means have failed to give relief, and before the urinary tract becomes irreparably damaged by the combined effects of obstruction and septic infection.

Prostatectomy performed at this time should give the lowest mortality and the most perfect results.

If the operation is performed when the bladder is hypertrophied and contracted, frequency of urination will logically follow the operation, although the pain and irritability of the bladder, which caused the patient's distress, will be relieved.

Cases of severe septic inflammation of the bladder with sacculation and failing kidneys will be greatly benefited and will improve rapidly after the

obstruction is removed, if the kidneys are strong enough to stand the first blow. The dysuria and irritability of the bladder, the main symptoms for which the patient sought relief, are removed, but the urine may continue to contain pus long after the effects of the operation are past, and may require the continuance of general and local treatment.

I take it, if surgeons would operate early before demoralization of the whole of the urinary tract takes place, the results of prostatectomy would be excellent. I operated my eleventh case this morning. It was a case in which the prostate was quite large with a moderate residual urine and a slight cystitis and if we have no post-operative complications, I shall expect excellent results.

The doctor has referred to Bottini's operation. It is one of the oldest operations for prostatic obstruction, having been practiced exclusively by Bottini for twenty years. Freudenberg, of Berlin, modified the instrument and popularized the operation. The chief objections to Bottini's operation are: First, that no amount of knowledge or experience can determine the exact condition of the obstruction before the operation is undertaken, or whether the obstruction will be relieved by the operation, as about twenty per cent. have to be operated upon several times before relief is obtained. Even experienced surgeons, as Bolton Bangs and Willy Meyer, both pioneers in this country in Bottini's operation, have reported cases in which they cut into the membranous urethra which was followed by urinary infiltration and abscess, which means death unless relieved by prompt perineal section. Such an accident is nothing more than what is to be expected when we consider that the operation is done entirely in the dark.

Another strong objection to Bottini's operation is, that there is no provision made for drainage or rest of the inflamed bladder, the one great point necessary to success in curing any septic cavity. The operation is liable to be followed by acute retention, by spasms and by urethral fever. I have never performed Bottini's operation, but from what I have seen in others and from what I have been able to learn, it is not an operation that appeals to me as very surgical.

The results that Dr. Nuzum has had in his own work on prostatectomy and the results of the various surgeons he has quoted, are quite remarkable when we consider that the operation is performed on a man of advanced age, with diseased blood vessels, and with an infected bladder and with failing kidneys.

DR. NUZUM (closing)—I would just say that I quite agree with what Dr. Hayes has said. I believe that a man with a paralyzed bladder, or with a diseased urinary tract, may get relief from the prostatectomy, but I cannot imagine how it will cure sacculation or a paralyzed bladder. I had a case where the bladder was paralyzed and where the man has been able to empty his bladder ever since the operation, but he cannot do it as well as he could if he had good muscular fiber around it.

MANAGEMENT OF THE MOTHER DURING CHILDBED PERIOD.*

BY A. D. GIBSON, M. D.,
PARK FALLS, WIS.

This seems at first glance to be a very simple and commonplace subject to engage our attention after listening to our scientific theses and their equally learned discussions. A large percentage of our members are country practitioners and my subject is one that interests them daily. To a busy practitioner a case of obstetrics becomes a routine matter and is treated as such, but to the mother it is a red-letter day and approached with the gravest fears.

Too often we are prone to let our services terminate with the completion of labor and leave our patient to the mercies of well-meaning Marthas, when, if we but pause to consider, it is evident that the future health of the mother is influenced greatly by the post-partum period. The subject is an exceedingly simple one, but the bulk of our practice is composed of the little things.

The post-partum period begins with the evacuation from the uterus of the fetus and placenta, and continues until the involution of the uterus. Upon examination we find that the genitals are left in a traumatic condition from the raw surfaces of the uterus to the erosion of the cervix, vagina and vulva, thus rendering the parturient canal susceptible to the ready ingress of microbes and a subsequent puerperal septicemia.

The repair of the genital system should go on immediately after labor is ended. The ruptures of the vulva commonly heal by first intention. The vagina, which after delivery is soft and relaxed, becomes contracted, shortened and narrowed, so that in a month's time it has regained its normal size. After delivery the uterus contracts and can readily be palpated as a firm solid body. The fundus is usually found in the median line when both rectum and bladder are emptied; an impacted rectum tends to displace the uterus to the left side and a full bladder to the right side. The process of involution is noted by the height of the fundus, which, following confinement, is about at the level of the umbilicus, and in about ten days reaches the symphysis pubes. The complete involution of the uterus varies in each case but usually takes about three months. The lochia varies with the individual. As a general rule, from the first to the third day, it is sanguinious; from the third to sixth day, mucopurulent tinged with blood; from the sixth to ninth day, mucopurulent; after the ninth

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 4, 1903.

day, usually slight. Any marked deviation needs therapeutic attention. The appetite is usually lessened and thirst increased. Owing to the genital discharges, the increased elimination of skin and kidneys, and the lessened amount of food ingested, there is a loss of weight during the first week of approximately one-tenth the normal weight.

The after-pains are similar to those of labor except of a milder character. They are the result of contractions and continue from one to four days. Their severity seems to be in inverse proportion to the previous pains accompanying labor, hence, they are usually absent in primiparæ or present in a mild degree, increasing in severity with each subsequent confinement. They are more prominent in cases in which the uterus is over distended by twin pregnancy or an excessive amount of amniotic fluid. They are also increased by a full rectum or bladder.

I will assume that the child has received proper attention and we turn our thoughts to the mother from whom the placenta has just been delivered. The next thing to do is to thoroughly cleanse the mother. Too much emphasis cannot be placed upon the immediate removal of all soiled clothes. Many of the subsequent ills of the post-partum period may be attributed to neglect at this time. There is scarcely any condition that will not permit the toilet of the woman to immediately follow the delivery of the placenta. The external genitals should be well cleansed with some antiseptic solution, such as carbolic acid 1 to 50, or bichloride of mercury, 1 to 4000, and dry sterilized pads applied. Personally I am opposed to two procedures which are commonly practiced at this time and concerning which our best obstetricians differ, namely, the post-partum douche and abdominal binder. I want to sum up my objections to each of them, as the object of this paper is to provoke discussion. I personally consider the binder as an heirloom of the past; it owes its practice to tradition. The points usually urged in its favor are: the compression of the abdomen; to favor involution; the comfort of the patient, and last, but not least in the eyes of the laity, the preservation of the figure. Why should the abdomen be compressed? We have all observed the uterus in thin women pushing up the abdominal walls so as to resemble a tumor. Compression only serves to increase the tendency towards subsequent displacement. I fail to see how the process of involution can be promoted by a binder tight enough to produce abdominal pressure, as the uterine displacement cannot but retard involution—if it is not applied so as to exert pressure on the abdomen, how can it possibly affect involution? As to the sense of comfort experienced by a binder, I admit that a binder for the first few hours tends to relieve that all "gone"

feeling. After that it is an article of annoyance as it is never in place and is always slipping over the trochanters. As to the preservation of the shape, I fail to see how anything that would tend to promote relaxation of the muscles of the abdomen can have any beneficial influence. Time will not permit of showing the baneful effects a tight binder may have on the ovaries, bladder, and rectum. A patient who has experienced labor without a parturient binder will not permit it to be used. Why continue a practice that is so prolific of uterine displacements and subinvolution? It is opposed to the principle of doing no harm even if we do not do any good. The post-partum douche is equally as baneful in its results as the binder, but fortunately it is being more speedily relegated to the customs of the past. Parturition is a physiological and not a pathological condition, and therefore, if physiological, why interfere with Nature? Nature stands ever ready to defend any physiological process she has instituted. In labor she protects the after-coming head by the bag of waters which act as a dilating medium unexcelled by the designs of man, and yet he often ruthlessly punctures these membranes, and behold a case that Nature was handling efficiently oft times seriously delayed. Nature also lubricates with mucus the birth canal making it possible for the head to freely glide over the already dilated surfaces without producing lacerations, but the obstetrician, by the frequent manipulation of his fingers in the vagina, robs it to a certain extent of this mucus, thus rendering the vagina more prone to lacerations. Nature, after the delivery of the child and placenta, thoroughly bathes the entire canal with blood and sets the white corpuscles on guard to prevent any invasion of pathologic germs. Man is here also apt to interpose and proceeds to douche the patient, removing Nature's safeguards, tending to favor rather than prevent sepsis. It is a poor routine for even a physician to give this douche, but where he simply orders it done, not noticing the kind of syringe and nozzle used, it is criminal. We are considering normal cases, but of course in many cases attending circumstances justify the douche. Many of our practices have naught but custom to sustain them. They are continued simply because their effects are not studied, and it is easier to follow blindly than to seek new paths. A practice that cannot withstand a critical test without demonstrating its material merit should not receive our support.

We left our patient resting comfortably upon clean dry bedding, and the baby bathed and dressed. At this stage a chill often sets in but it is usually of little importance, for under the influence of a warm, dry bed it soon subsides. A slight rise of temperature may follow the parturient act and also about the third day when lactation commences.

The pulse, however, instead of normally increasing, if anything decreases, the rate often being as low as 40 or 45. If the pulse is rapid the cause should be ascertained. During the first week the skin is active and moist, therefore the patient is sensitive to changes of temperature. The appetite is lessened, the bowels sluggish and the urine abundant. There is sometimes urinary retention. It is quite important that the action of the urinary organs should be free. It is almost impossible for some women to void urine in the recumbent position, so in these cases it is permissible for the patient to sit up to urinate. She can be propped up with pillows to a sitting posture without any injury. Catheterization at this time is fraught with many dangers of infection and should not be resorted to if it can possibly be avoided. It is needless to suggest that the external genitals should first be well cleansed and the catheter rendered aseptic and well lubricated. Some physicians boast of their ability to catheterize a patient under the clothing thereby not exposing the patient; this is but an instance of false modesty and should be condemned. The normal bladder is difficult to infect but a paralyzed bladder such as is found at this time is very readily infected.

The air of the lying-in chamber should be pure and fresh and much cooler than permissible for the babe, hence separate rooms for mother and child are to be preferred. The diet of course varies with the condition of the patient. There is no sense in feeding the patient with the weak teas and gruels as commonly practiced by the laity. After a tiresome labor and a child to nurse it seems strange that a woman should be deprived of an abundance of good nourishing food. A woman who has experienced the ordeals of labor needs as much nourishment as a ploughman. During the first few days, however, when the thirst is excessive, light liquid foods should be given, but solid food should be given after the bowels have moved freely. Easily digested articles such as eggs, poultry, steak and the like should be selected. Cooked fruits aid materially in overcoming the constipation which is common at this time.

Nursing. One of the greatest mistakes of the childbed period is withholding the babe from the breast during the first three days or until the milk proper is secreted. In answer to the query, "When shall I put the child to the breast?" I usually respond that "the baby is ready for it now but you might rest a few hours first." The child usually seizes the nipple eagerly at this time and soon accustoms itself to Nature's mode of obtaining nourishment, while if the application of the babe to the breast is deferred it is sometimes quite a task to get the child to nurse. Though the quantity of the colostrum is small,

it is ample for the needs of the child and acts as a laxative to pass off the meconium. It is infinitely better than the several teas that are used by many as substitutes. The mother is equally benefited as nursing aids materially in promoting uterine contractions thereby hastening involution. Moreover, it materially lessens the painful distention of the breasts, and the mother is far less apt to have trouble with sore nipples.

Laxatives. It has become an universal custom and sanctioned by the majority of physicians not to move the bowels until the third day. The rectum often becomes quite full by this time and the feces quite solid, thereby causing the mother much unnecessary suffering and also subjecting her to more or less autointoxication. The bowels are usually evacuated just prior to birth so I prefer to have them move again from 24 to 36 hours after birth. Owing to the sluggish condition of the bowels at this time some laxative drug is usually indicated. The drug used depends somewhat upon the condition of the bowels prior to confinement and the amount normally required to produce a copious evacuation of the bowels. Perhaps the ideal drug is castor oil but this is usually so repugnant to our patients that I usually resort to the compound licorice powder or glycerine suppositories. In rare cases more powerful drugs are indicated. The bowels should be moved every other day while the patient is confined to bed.

Position in Bed. I let my patients follow their own inclinations from the start when their labors have been normal and when there is no history of pathological conditions due to a former confinement. After the first day or so I like my patients to change their position often. Some physicians insist upon their patients lying flat on their backs during the greater part of the lying-in period. Such a position may tend to a malposition of the uterus. Again when lying upon the back the vaginal cul-de-sac forms a pocket which is filled with the lochia, and which, if retained for some time, only serves to increase the danger of infection and autointoxication. We have all noticed the gush of blood from the vagina when our patient assumes the lateral posture after having been on her back for some little time previously. I even go further and permit my patients to move as freely as they wish after the third or fourth day, even permitting them to sit up in bed. I allow them to be propped up and to use the chamber in preference to the bed-pan from the start. The danger is not in too early sitting up but rather in supporting weight upon their feet too soon. A good deal of superstition prevails about the third and ninth days, etc. We have all known women who would be up and feeling quite well before the ninth day, but on that day would not leave their

beds owing to a belief that that day was a critical one. There is more excuse for considering the third day to be critical, as considerable general disturbance is sometimes felt when the breasts first become distended with milk. The patient often feels chilly and has headache, loss of appetite and sensitive breasts, and pains radiating from the nipples to the axillæ. The febrile disturbance is less than usually considered as the clinical thermometer shows but a slight if any increase over normal. There is no set rule just how long to keep a woman in bed as every woman is a law unto herself. What one woman may do with impunity will produce permanent invalidism in another. The majority of women expect permission to get up on the tenth day, but while in a majority of cases that is a safe custom, there is no reason why the tenth day should be especially selected. In cases where puerperal fever has supervened the confinement to bed should be prolonged. To judge from the general opinion governing this period one would imagine that the womb involutes so as to recede with a snap into the pelvic cavity on the ninth day. But can we blame the laity for some of their superstitious beliefs when eminent obstetricians differ so widely in their views? Some extremists claim that the rest in bed following delivery is not necessary, and if prolonged is weakening, and others go to the opposite extreme and declare that a parturient woman should be kept in bed upon her back for four weeks and should not at any time during this period assume the upright position. They further recommend using vaginal tampons for another month. The process of involution usually takes about six weeks, so my usual plan is to suggest two weeks in bed, allowing the patient, in normal cases, and after the first three or four days, to take any position she desires, and after the first week to sit up in bed whenever she wishes. The uterus at the end of the second week still weighs about 12 ounces, about five times the normal weight, still normally it is confined to the pelvis and supported by the pelvic ligaments and muscles. The third week the patient should be allowed to dress and spend most of the week on the lounge or in the rocking chair. The fourth week she might take short walks in the open air. The uterus is still enlarged and for the next two weeks only the lightest of household duties should be resumed. Carrying of heavy weights, climbing stairs and extra hard work should be interdicted until at least after the termination of six weeks. The patient should not at this time have a single symptom referable to the pelvic organs.

I firmly believe it would be better for all our patients if they could adhere to the above routine plan of treatment, and such treatment coupled with good care during confinement and the appropriate treat-

ment of all lacerations would result in robbing the gynecological specialist of a large part of his fees. Our patients, however, are not all financially able to adhere to the above scheme, and we all have patients who do their own washing within a week following confinement. I try to insist that a woman remain in bed while the lochia is of a bright red color. It is hard to get our patients to always consent, still I think it would be a good thing to make it a routine practice to examine them six weeks after the termination of labor, and perhaps by so doing can save much future suffering, any abnormality being readily detected at this time.

The bulk of the time spent in this paper was devoted to the prevention and treatment of the more common complications attending this period, such as post-partum hemorrhage, puerperal fever and ruptured perinei, but time will not permit to even enter into their discussion.

In conclusion, when we see a poor woman who is all broken down physically, and hear the remark that she breeds too fast, let us rather place the blame to lack of proper care that keeps her down.

I am very grateful to the members present at the interest taken in so simple a theme, and if a point has been raised that will encourage us to be more zealous in the treatment of our obstetric patients, the time spent in the preparation of this paper will not have been in vain.

Discussion.

DR. G. E. BALDWIN, Dartford—After the exhaustive paper of Dr. Gibson upon this subject so important to all of us, there is but little to be said in discussing it. There may be some difference of opinion in regard to the use of the douche, the binder, etc., but there is one point I think Dr. Gibson has omitted, a point of very great importance, especially to the comfort of the mother during the lying-in period, and that is the care of the breasts and nipples. The secret of comfort to the mother, as with all other parts of the lying-in period, may be summed up in the word "cleanliness." The breasts and nipples cannot be cleansed too often—at least twice every time the child nurses, first, before nursing, to remove any substances which have been applied, such as alum or whatever it may be, to toughen the skin of the nipples; then, after the child has nursed the nipples should always be cleansed with a piece of absorbent cotton, moistened perhaps with boiled water. In that way we avoid a great many of the fissures and a great deal of the suffering which woman endures during this time. We all know there is nothing much more painful than fissured nipples for a nursing mother. The secretions of the mouth of the child favor the development of fissures and should always be removed after the child has nursed. It is a point that is looked upon by the laity as being of minor importance, but it is a point of the utmost importance to the comfort of the mother. If a fissure should occur it is unnecessary for me to suggest remedies. They are legion and under almost any plan the fissures will heal if only they are kept clean.

WISCONSIN MEDICAL JOURNAL.

OFFICIAL ORGAN OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A Monthly Journal, published by the Wisconsin Medical Journal Publishing Co., and owned by and devoted to the interests of the Medical Profession of this State.

Original articles, Clinical notes, Correspondence, and Communications of interest to the Medical Profession are solicited. Reprints of articles contributed to this Journal will be furnished at cost price, but a number of copies of the Journal will be furnished contributors gratis. All manuscripts should be typewritten.

ARTHUR J. PATEK, A. B., M. D., Editor,
121 Wisconsin Street, Milwaukee.

Associate Editors.

CHAS. S. SHELDON, M. D., Madison. OTTO H. FOERSTER, M. D., Milwaukee.
HOYT E. DEARHOLT, M. D., Milwaukee. ALBERT W. MYERS, M. D., Milwaukee.

Collaborators:

Horace M. Brown, M. D.,	Milwaukee	U. O. B. Wingate, M. D.,	Milwaukee
Arthur J. Burgess, M. D.,	"	Chas. Zimmerman, M. D.,	"
Richard Dewey, M. D.,	"	Frank H. Edsall, M. D.,	Madison, Wis.
Louis Frank, M. D.,	"	W. E. Fairfield, M. D.,	Green Bay, "
Walter Kempster, M. D.,	"	Wm. E. Ground, M. D.,	W. Superior, "
William Mackie, M. D.,	"	Julius Noer, M. D.,	Stoughton, "
Solon Marks, M. D.,	"	Chas. W. Oviatt, M. D.,	Oshkosh, "
P. H. McGovern, M. D.,	"	L. H. Prince, M. D.,	Palmyra, "
Gilbert E. Seaman, M. D.,	"	H. Reineking, M. D.,	Milwaukee, "
Wm. H. Washburn, M. D.,	"	W. T. Sarles, M. D.,	Sparta, "

Annual Subscription, - - - $2.00. Single Copies, - - - - - $0.20.

Address all business communications to
M. M. TAYLOR, Business Manager,
709 Herman Bldg., Milwaukee, Wis.

CHICAGO OFFICE:
J. L. McKENNA, Commercial Nat. Bank Bldg.
175 Dearborn Street.

Vol. II. DECEMBER, 1903. No. 7.

EDITORIAL COMMENT.

THE NEWER PATHOLOGY OF THE GALL-BLADDER.

The literature of cholecystitis and cholelithiasis has been very exuberant during the past five or six years since attention was called to the frequency with which these conditions occur as sequelæ of typhoid fever, and the dependence of cholelithiasis upon cholecystitis has been demonstrated.

The conclusion has been gradually forcing itself upon the minds of all that catarrhal inflammation of the gall-bladder is the most important factor in the etiology of gall-stones, and that constipation and

impeded circulation, especially that resulting from cardiac lesions, are the two most important predisposing conditions. Another predisposing factor that is highly important, is obstructed circulation through the liver resulting from the pressure exerted by tightly laced corsets, and the consequent thoracic form of respiration so universally practiced by women. This variety of breathing, obviously, affords but little if any aid to the circulation of blood through the abdominal organs, and when we recall the circumstance that gall-stones occur more frequently in women than in men, the proportion being given by different writers as anywhere from 3 to 1, to 5 to 1, we are, it would seem, justified in attributing this fact more largely to the peculiarity of respiration than to any one other thing. The therapeutic or rather the prophylactic deductions from the foregoing considerations are evident. By the systematic and daily practice of deep breathing, especially of the abdominal type, taking particular pains to bring into active use the abdominal, that is, the accessory expiratory muscles, much can be accomplished, for by this means the portal circulation is very greatly aided.

The Symposium on Gall-bladder Affections in the third volume of the International Clinics for the current year is eminently timely, and sets forth fully our present knowledge concerning these diseases, the subject being viewed from every aspect, etiologic, pathologic, semeiologic, diagnostic, prognostic and therapeutic, the latter both medical and surgical.

EDITORIAL ASTIGMATISM.

In the October issue of the *Wisconsin Medical Recorder* we find an original communication entitled "Consultation by Mail." The author has found this practice remunerative and justifies it to his satisfaction.

A few selected paragraphs may be more instructive than other comment. Here is one: "I have arranged and had printed a small folder of 'Suggestions to Patients,' a copy of which is enclosed with an encouraging letter to the prospective patient." And again: "describe pains accurately, as burning, bursting, cutting, crushing, darting, drawing, lacerating, piercing, pressing, pushing, pulsating, stinging, stitchy, shooting, tearing, throbbing, or any other sensation." And another: "Are your nails long, short, arched, clubbed, flat, regular, irregular, brittle, tough, thick, thin, smooth, rough, ridged, cracked or with white specks on them? Give color of nails." One

paragraph more: "This is a brief outline of a method of consultation by mail which has materially added to my cash account for several years. Some of my hyperethical friends say it is quackish. They claim that no physician can successfully or satisfactorily treat a patient whom he does not see. To my mind such ideas are twaddle and show that the physician who talks that way is not keeping abreast with the progress made in medical and surgical science or science in general, and especially is he deficient in the up-to-date American methods of doing business."

The author assumes the title of Lecturer at the University of Minnesota. As a matter of fact this is an assumption to which he is not entitled without qualifying it by stating that he occupies such a position in the homeopathic department, the latter being a school numbering 14 students who are taught their first two years' work in the laboratories and by the instructors of the Medical Department proper of the University of Minnesota.

Shall we comment upon articles like the above and their admissibility to journals that are supposed to be read by intelligent and respectable physicians? *Verbus sapienti sit.*

DR. OSLER ON MEDICAL LIBRARIES.

It was the good fortune of the members of the Milwaukee Medical Society to listen to a very interesting address by the distinguished Dr. Wm. Osler, during his recent visit to Milwaukee. Dr. Osler confined himself to the subject of medical libraries, and his words were doubtless inspired by the very evident needs of this Society's library. In the course of his remarks he outlined a serviceable collection of books as falling into four principal divisions: Journals, Monographs, Systems of Medicine, and Historical works with special reference to the Medical Americana.

It is, of course, to be regretted that funds are not available for the purchase of the various volumes that would make the Society's tomes more helpful to those who desire to avail themselves of the good things contained therein. However, a few suggestions such as came from Dr. Osler, who has helped build up a large and most excellent library in Baltimore, are, indeed, an incentive, for they prove the possibilities and show the way, and when these two lessons are learned success ought be assured. Dr. Osler believes that in a dozen years

this Society might easily boast of the possession of 25,000 volumes, and—more than this—that liberal minded and generous patrons could eventually establish this library in a home of its own. The further thought that promoted this latter suggestion, is, that friendly intercourse among physicians, which at best is often marred and restricted by petty things ("physicians are as sensitive as women") would thereby be encouraged, and it would furnish one means of bringing harmony into professional relations. Dr. Osler, who has done so much to enrich our own country's contributions to the world's literature, speaks from experience and conviction, and it would, indeed, redound to his everlasting credit did his words awaken in his hearers a full realization of the duty each one owes to himself and his brother practitioner, *viz.*, not to limit his time, energy, and income to individual work and advancement, but, by appreciating the need of a generous storehouse of all good medical thought, rendering every assistance possible to build up such a treasure house for the benefit of himself, his fellow practitioners, and those who inherit his scientific aims. That better work will emanate from those who—if the facilities are offered—would readily avail themselves of them, cannot be doubted; and then Milwaukee may some day take the place in the field of medical science that is hers by right of size and intellect.

QUACK DRUGGISTS.

The medical profession has long been familiar with the method of the medical quack, and the respectable element of the profession is unanimous in condemning this fraudulent class. Little is said, however, about another species of quack who bears a more or less close relation to the medical profession, namely, the Quack Druggists. A glance at any of the metropolitan daily papers will reveal their identity. They are numerous, bold, active, and even more unscrupulous than the medical quack. They are the men who advertise that "the operative treatment of hemorrhoids is a failure, is dangerous," etc. "Skinem's Healing Pile Salve for sale only by Skinem & Co., Druggists." "Don't waste time and money on useless treatment—go to the Central Drug Store and get a free sample of Dr. Blank's positive cure for all forms of Catarrhal Disease—never known to fail. Interesting demonstration in the front window by young woman disguised as a nurse." "Are your vital organs becoming weak? No need to consult

a physician. Robinson & Co., Druggists, put up a preparation known as Parisian Sexual Nerve Promoter, copied from a prescription by a celebrated French physician and prescribed widely by the medical profession. $1.00 per box—cheaper than a consultation by 50%." "Dr. Bunion's Maw Maw is sold under our personal guarantee as to its efficacy," etc., etc., *ad nauseam.*

These are the men who should be marked and shunned by the medical profession. They bear the same relation to the pharmaceutical profession that the advertising medical mountebank bears to the profession at the outskirts of which he hovers and plies his vulturous business.

This class of druggists is not entitled to support as honest members of the pharmaceutical craft. They are pharmaceutical pirates and should be regarded as such not only by medical men, but by honest professional druggists as well.

THE GLUTEN FLOUR F AUD.

The exposure, by the State Board of Health of New Hampshire, of the fraud practiced upon the purchaser of anti-diabetic gluten flour, shines forth like a good deed in a naughty world. Fourteen brands of flour made by six or seven firms, and advertised as healthful products for diabetic patients, were analyzed and found to average almost 48% starch. It is a simple matter to test the starch reaction in any flour, and a notorious fact that there are no starch-free flours to be had, but it is a surprise to find such a large percentage of starch contents in all. As a matter of fact there is less danger in permitting the diabetic patient to eat a certain prescribed amount of well-baked bread or toast, than deluded with the belief that the vile bread made of gluten flour is harmless—to give him free rein with this indigestible article. No suitable substitute for bread has as yet been devised, and, least of all, are the claims made by manufacturers of these glutens to be given a hearing. The frequently existing boulimia of diabetics is additional reason why physicians should warn their patients against the false sense of security given by a supposedly starch-free gluten flour.

NEWS ITEMS.

State Insanity Statistics.—The number of insane persons in Wisconsin on November 1, under public care, was 5,423. This is an increase of 248 in the last sixteen months. The patients are distributed as follows:

Brown, 121; Chippewa, 142; Columbus, 101; Dane, 156; Dodge, 122; Dunn, 126; Eau Claire, 124; Fond du Lac, 110; Grant, 129; Green, 113; Iowa, 122; Jefferson, 127; LaCrosse, 146; Manitowoc, 160; Marathon, 167; Monroe, 50; Milwaukee, 220; Outagamie, 137; Racine, 131; Richland, 110; Rock, 150; Sauk, 116; St. Croix, 139; Sheboygan, 118; Trempealeau, 108; Vernon, 117; Walworth, 125; Waupaca, 106; Washington, 126; Winnebago, 203; total, 3,922.

The Northern Hospital at Oshkosh has 599; State Hospital, Mendota, 403; Milwaukee hospital, 499.

Frederick Stearns & Co.'s new building for the preparation of vaccine has been completed. The building is most modern in all its equipments, being of brick, well lighted, heated and ventilated. Every provision for absolute asepsis has been made. The incubating, cleaning and sterilizing rooms are models of neatness, and their interior is so finished that they can be thoroughly and effectually cleansed. The operating room has all the aseptic appointments of a well equipped modern hospital.

"Dr." Arthur C. Probert, vice-president of the Christian Hospital, Chicago, was recently found guilty of fraudulent use of the mails and was fined $500 and costs. Probert formerly operated his fraudulent schemes in Wisconsin and was arrested several months ago, on complaint of Dr. John B. Murphy and others, who said their names were being used without authority on "certificates" of the hospital, so that other physicians might be swindled.

William M. Warren, publisher of the Therapeutic Gazette, the Bulletin of Pharmacy, the Medical Age, etc., for many years a strong force in the well known house of Parke, Davis & Co., and widely known and respected by the medical profession, died November 11th at Detroit, Mich.

Marmorek's Serum.—Cable advices in the public press concerning the merits of Marmorek's tuberculosis serum are of a decidedly unfavorable nature. Physicians in Paris, Breslau and other European cities, who have watched the experiments say that they were unsuccessful.

The Knowlton Training School for Nurses, in connection with the Knowlton Hospital, Milwaukee, recently graduated its first class, consisting of six members. Dr. P. H. McGovern delivered the address to the graduates.

Dr. H. Reineking, who recently removed from Sheboygan to Milwaukee, has opened an office at 230 Grand Avenue, corner Third Street.

THE STATE MEDICAL SOCIETY OF WISCONSIN.

ORGANIZED 1841.

Officers for 1903-1904.

F. E. WALBRIDGE, Milwaukee, President.
JAMES MILLS, Janesville, 1st Vice-Pres. C. C. GRATIOT, Shullsburg, 2nd Vice-Pres
CHAS. S. SHELDON, Madison, Secretary. S. S. HALL, Ripon, Treasurer.

Provisional Councilors.

1st Dist., J. G. Meachem, - - - - Racine.
2nd Dist., J. S. Walbridge, - - - - Berlin.
3rd Dist., C. S. Smith, - - - - - Elroy.
4th and 5th Dist., G. A. Kletzsch, - Milwaukee.
6th Dist., Geo. V. Mears, - - - Fond du Lac.
7th Dist., W. T. Sarles, - - - - Sparta.
8th Dist., J. F. Pritchard. - - Manitowoc.
9th Dist., T. J. Redelings, - - Marinette.
10th Dist., J. M. Dodd, - - - - Ashland.
11th Dist., E. L. Boothby, - - - Hammond.

Next Annual Session, Milwaukee, June, 1904.

The Wisconsin Medical Journal, Official Organ.

SOCIETY PROCEEDINGS.

ANNOUNCEMENT.

Referring to the preliminary announcement of the Program Committee in the October number of this JOURNAL, for the next meeting of the State Medical Society, **are you going to contribute a paper?** If so, communicate with DR. HENRY B. HITZ,
Chairman Program Committee.
121 Wisconsin Street, Milwaukee.

ORGANIZATION NOTES.

During the past month progress has been less rapid than in September and October. It is probable that many of the Counties are waiting till the time of the Annual Meeting in December before reporting. Yet the work goes on. Green County reports with 15 members, Taylor with 6, Wood with 15, Sauk with 14, and Jefferson with 15. Monroe and Marquette report having organized, but have not yet sent list of members. Rock, Eau Claire and Vernon, which have had societies several years, have not yet reorganized but will soon do so. The 17 counties out of the 72 still unorganized are as follows: Kenosha, Adams, Marquette, Crawford, Richland, Buffalo, Jackson, Pepin, Trempealeau, Calumet, Waushara, Door, Kewaunee, Florence, Forest, Shawano, and Vilas. Several of these counties are very small and will be "hyphenated" to each other or to some larger county; with proper effort these should all be brought into line within the next two or three months.

The Councilors report indifference and apathy in some quarters, but this is because the immense value and importance of the work is not understood. When the profession all over the state realizes that this is a genuine organization of the whole profession of the country—that in the near future it will embrace every county in every state in the union—that membership in their county society will be the only

means of entrance, either into the State Society or the American Medical Association, and furthermore, that it is for their own interests, in all ways, to organize and maintain a live County Society, we shall find very few Counties which voluntarily choose to be left out in the cold.

It may be well to state again that all counties reporting for the first time, or applying for charters, after October 13th are expected to collect $2.00 as State dues from *all* the members, including former members of the State Society. This pays the dues to January 1, 1905. On account of the change in our fiscal year this plan does a slight injustice to the old members, but the Council deemed it wise to make no discrimination, and hoped that this slight tax would be cheerfully borne.

Some of the Counties have expressed a wish to publish a fee-bill, and have asked if such a course would not conflict with Sec. 3, of Chap. 2 in the By-Laws of the County Constitution. Without doubt it was the opinion of the Committee which framed the Model County Constitution that "schedules of fees" are not desirable. But this is simply a "model" for convenience and general uniformity. Each County can amend it as seems best, so long as it does not conflict with the Constitution of the State Society.

The "card-index" material has now been sent to most of the County Secretaries, and all are earnestly requested to begin work at once and set their "house in order." The apparatus is simple and all will readily understand it. Still, if any find difficulties, the State Secretary will be only too glad to answer all inquiries. First, secure the names of *all* the physicians in the County—of all sorts. Then send to each a personal record blank, and *keep at them* till their personal record is secured. The names of those who refuse to report will be sent to the State Secretary and he will try *his* powers of persuasion upon them. Copy the record upon the index cards and send the personal record blanks to the State Secretary for use in the State "card-index." As changes occur in the personnel of the profession in the County, make the "card-index" to correspond, so that it shall, at all times, be a complete and correct index of the whole profession in the County. This involves much care and considerable time, but the knowledge of the profession which it gives us is well worth all it costs.

There is every indication that the new County Societies are taking hold of their work in earnest. The spirit is excellent, and the programs of scientific work show great interest and enthusiasm. It is a matter of common remark that these small Societies are of much greater benefit to the members than are the larger bodies. It is a good plan to have but few papers, but to call out a thorough and general discussion by all present. This should be planned largely before the meeting. Then don't fail to emphasize the *social* features. Take dinners together, and see that every one has a good time. It has been said that it will be more difficult to keep up these County Societies than it has been to start them, but with the right spirit and plenty of hard work there should be no trouble in the matter. Rest assured there will be no step backward. None will fall by the way, but all will grow stronger and more helpful with the years. C. S. S.

EAU CLAIRE COUNTY MEDICAL SOCIETY.

The joint annual meeting with the Inter-County Medical Society was held at Eau Claire, Nov. 17. The leading paper was one by Dr. James E. Moore, of Minneapolis, on "Modern Renal Surgery." Other papers presented were: "Empyema," by Dr. Edwin S. Hayes; "Eye-Strain," by Dr. Elmer L. Fletcher; "Penetrating Wounds of the Cornea," by Dr. Elmer E. Rice; "Hourglass Contraction of the Stomach," by Dr. Wm. Lerche; and "Spontaneous Rupture of the Heart,'" by Dr. Hiram A. Fulton.

Dr. E. L. Boothby, Councilor for the Eleventh District, read a paper on "Organization of County and New District Medical Societies."

This was the last meeting of the Inter-County Medical Society, which disbanded at this meeting to give place to the new West Wisconsin District Medical Society, notice of which is given elsewhere in the JOURNAL.

FOND DU LAC COUNTY MEDICAL SOCIETY.

The Fond du Lac County Medical Society which was organized Oct. 22, 1903, held its first annual meeting at Fond du Lac on Nov. 11. The election for officers resulted as follows: president, Dr. J. Henry McNeil, Fond du Lac; vice-president, Dr. J. W. Burns, Oakfield; secretary and treasurer, Dr. Flora A. Read, Fond du Lac; delegate, Dr. J. W. Burns, Oakfield; censors, Drs. G. V. Mears, Fond du Lac, J. W. Powell, Rosendale, and F. S. Wiley, Fond du Lac.

Three new members were admitted, bringing the number in the society up to forty-four.

FLORA A. READ, M. D., Secretary.

IOWA COUNTY MEDICAL SOCIETY.

The Iowa County Medical Society met in the parlors of the Higby House at Dodgeville, December 1, and re-elected the present officers for the ensuing year. Two new members were admitted, Drs. W. M. Gratiot, of Mineral Point, and D. B. Hamilton, of Ridgway. The Society now numbers seventeen members out of a total of twenty-two physicians in the county and will hold bi-monthly meetings at Dodgeville. S. P. DEAHOFE, M. D., Secretary.

IRON COUNTY MEDICAL SOCIETY.

The physicians of Iron County have effected an organization with the following officers: President, Dr. J. H. Urquhart, Iron Belt; vice-president, Dr. A. Uren, Hurley; secretary and treasurer, Dr. T. J. Hambley, Hurley; delegate, Dr. A. Uren; censors, Drs. A. Uren, T. J. Hambley, and J. H. Urquhart.

LA CROSSE COUNTY MEDICAL SOCIETY.

The regular November meeting of the Society was held at the rooms of the New La Crosse Club, the president, Dr. J. A. Bradfield, presiding. Dr. W. T. Sarles, of Sparta, addressed the society in

regard to its organization as proposed by the committee of the American Medical Association. Prof. Bird, Superintendent of Schools in La Crosse, addressed the meeting on the subject of "Voluntary Regular School Examinations by Resident Physicians." The subject was discussed and suitable resolutions were adopted.

The regular monthly meeting of the La Crosse County Medical Society was held December 3, at the New La Crosse Club. Officers for the next year were elected as follows: President, Dr. Friend C. Suitor; vice-president, Dr. E. R. Mulford; secretary and treasurer, Dr. Charles H. Marquardt; censor for three years, Dr. M. Marrison. The delegate to the State Society will be elected at the next regular meeting.

A venison supper with attachments was enjoyed by the many members present. The Society starts out on its new life with twenty-five members.

CHARLES H. MARQUARDT, M. D., Secretary.

LINCOLN COUNTY MEDICAL SOCIETY.

At a meeting held at Merrill the physicians of Lincoln County organized a County Medical Society on the standard plan. Dr. Joseph Faerber of Merrill was chosen president, and Dr. C. C. Walsh of Merrill, was made secretary and treasurer.

MARATHON COUNTY MEDICAL SOCIETY.

At a meeting held at Wausau on Oct. 10, the Marathon County Medical Society was organized on the standard plan with the following officers: President, Dr. D. LaCount, Wausau; secretary and treasurer, Dr. H. L. Rosenberry, Wausau; delegate, Dr. D. L. Sauerhering; censors, Drs. John Hund, L. E. Spencer, and A. W. Trevitt, all of Wausau.

MEDICAL SOCIETY OF MILWAUKEE COUNTY.

The regular monthly meeting was held in the trustees' room, Public Museum Building, Nov. 20, Vice-President Seaman in the chair. Twenty-one members were present. Dr. Herman Reineking read a paper on "Spina Bifida," detailing two cases of meningocele and one of meningo-myelocele. He emphasized relief of the local condition in the interest of greater comfort for the patient and greater ease in his care as an indication for operation, even without expectation of relief of more remote conditions. Dr. W. Becker added great excess of intracranial pressure as a contra-indication to operation. Dr. S. B. Sperry reported a small meningocele cured by continued pressure of compress.

Dr. Wilhelm Becker presented a paper on "Some Stenotic Conditions of the Colon and Rectum," calling attention especially to the not uncommon spastic stricture found at the junction of the colon and rectum. He brought out many ingenious points in diagnosis and explained his mechanical and medical treatment. He also presented a specimen of a ruptured ulcer of the sigmoid flexure due to arterial thrombosis from a case of hepatic cirrhosis with alcoholic history.

Dr. M. M. Spitz showed an instrument for use in circumcision, designed to assist in holding the prepuce and protecting the glans when making the first exposing incision. He explained that since devising it he has been told that the same principle has been used for centuries by the Mohels. A. W. GRAY, M. D., Secretary.

MONROE COUNTY MEDICAL SOCIETY.

The regular monthly meeting was held Nov. 2, at the offices of Drs. Sarles, Beebe, and Beebe, Sparta. Ten members were present.

Dr. S. D. Beebe read a paper on "Gall Stones"; this was followed by a profitable general discussion.

The society now has a membership of twenty.

C. M. BEEBE, M. D., Secretary.

ONEIDA COUNTY MEDICAL SOCIETY.

At a meeting of physicians held at Rhinelander the Oneida County Medical Society was organized on the lines suggested by the committee appointed by the American Medical Association. The election for officers resulted in the choice of the following: President, Dr. C. D. Packard, Rhinelander; vice-president, Dr. J. M. Hogan; secretary and treasurer, Dr. S. W. Stone; delegate, Dr. C. D. Packard; censors, Drs. C. D. Packard, P. B. Stewart, and H. L. Garner, all of Rhinelander.

OUTAGAMIE COUNTY MEDICAL SOCIETY.

The adjourned meeting of the Outagamie County Medical Society was held at Kaukauna, December 2. Dr. Donaldson, of Schiocton, became a member, bringing the membership up to twenty-six.

Dr. Nolan presented a case of acute osteo-myelitis and a crepitating shoulder. Dr. Boyd exhibited a case of multiple neuritis. Dr. Titus presented a case of "Railroad Spine" and one of cerebral hemorrhage following an accident in which there was no direct injury to the head.

Dr. N. P. Mills read a very excellent paper on "The Treatment of Chronic Nephritis."

The next meeting will be the annual one and will be held at Appleton, March 2, 1904. M. J. SANDBORN, M. D., Secretary.

PRICE COUNTY MEDICAL SOCIETY.

At a meeting held at Phillips, the physicians of Price County effected a permanent organization on the standard plan. The following officers were chosen: President Dr. W. P. Sperry, Phillips; vice-president, Dr. Dane Perry, Prentice; secretary and treasurer, Dr. A. D. Gibson, Park Falls; delegate, Dr. W. P. Sperry; censors, Drs. G. H. Hadley, Park Falls, and Dane Perry, Prentice.

Dr. John M. Dodd, of Ashland, Councilor for the Tenth District, was present and assisted at the organization.

ST. CROIX COUNTY MEDICAL SOCIETY.

The regular quarterly meeting of this Society was held at Hudson, December 1, and the form of constitution and by-laws recommended by the American Medical Association was adopted.

The following officers were elected for the ensuing year: President, Dr. E. L. Boothby, Hammond; vice-president, Dr. C. F. King, Hudson; secretary and treasurer, Dr. L. P. Mayer, Hudson; censors, Drs. P. A. Beebe, Glenwood; F. S. Wade, New Richmond, and F. W. Epley, New Richmond.

Five applications for membership were received. The next meeting will be held at Hudson on the first Tuesday in March.

L. P. MAYER, M. D., Secretary.

TAYLOR COUNTY MEDICAL SOCIETY.

A medical society has been organized in Taylor County with the following officers: President, Dr. E. LeSage; vice-president, Dr. T. M. Miller; secretary and treasurer, Dr. J. H. Francis, all of Medford; censors, Drs. C. E. Nystrum, Medford, and O. E. Werner, Rib Lake.

WASHBURN-SAWYER-BURNETT COUNTY MEDICAL SOCIETY.

At the last meeting of this Society which was held recently, Dr. J. P. Cox of Spooner, read a paper which was chiefly a resume of the early practice in Northern Wisconsin in the "eighties." Dr. Griffin reported an epidemic of measles, occurring among the Indians at the Government School at Hayward, 29 girls and 47 boys were affected. He pointed out the greater frequency of lung complications in boys in his series. Lobar pneumonia, capillary bronchitis, and bronchopneumonia ranging from 9% in girls to 40 in boys. Dr. Lenner had reports of two cases of "Pathological Fracture," one of upper third of tibia in a boy of 9, due to osteo-myelitis; the other a fracture of the femur in a woman of 42, due to malignant disease, with delayed union up to date.

Dr. Trowbridge, of Hayward, read a paper pointing out the predominance of abdominal symptoms in some cases of lobar pneumonia leading to a diagnosis of peritonitis, appendicitis, gall-stone, etc. He reported a case in which at first none of the symptoms pointed to the chest, but all to the left iliac region. On the third day the abdominal symptoms disappeared spontaneously, when rusty sputum, gradual shifting of pain to left lower lobe, cough, and rapid respiration (although this last had been present from the onset), called his attention to the chest, a diagnosis of pneumonia followed, crisis occurring on the fifth day.

Dr. J. B. Trowbridge of Hayward was re-elected president; Dr. J. P. Cox, Spooner, vice-president and delegate to State Society; and Dr. E. R. Hering, Shell Lake, secretary and treasurer.

E. R. HERING, M. D., Secretary.

WAUKESHA COUNTY MEDICAL SOCIETY.

The regular monthly meeting of the Society was held at the office of Dr. A. J. Hodgson, on Nov. 7. There were some very inter-

esting discussions and a paper was read by Dr. Philler on "Injuries of the Spinal Cord." This was followed by a general discussion.

The Society has been very prosperous and about one-half the physicians in the county have united with it.

B. M. CAPLES, M. D., Secretary.

WINNEBAGO COUNTY MEDICAL SOCIETY.

The November meeting was a joint meeting with the Oshkosh Medical Club, and was held at the Hotel Athearn, Oshkosh, on Nov. 2. Dr. C. O. Hansen, of Neenah, read a paper on "Heart Disease," for the County Society, and on the part of the Club papers were presented by Dr. Oviatt on "The Surgery of the Kidney," and by Dr. Noyes on "The Rational Treatment of Diseases of the Kidney." The meeting was well attended. S. B. ACKLEY, M. D., Secretary.

WEST WISCONSIN DISTRICT MEDICAL SOCIETY.

At the joint meeting with the Eau Claire Medical Society, held at Eau Claire, Nov. 17, at which the Inter-County Medical Society disbanded, there was formed the new West Wisconsin District Medical Society, which will include the county societies of Eau Claire, Chippewa, Dunn, Pepin, Pierce, and St. Croix Counties. The officers of the new organization are: President, Dr. E. L. Boothby, Hammond; vice-president, Dr. Edward H. Grannis, Menomonie; secretary and treasurer, Dr. J. V. R. Lyman, Eau Claire.

The date and place of meeting will be announced later.

MILWAUKEE MEDICAL SOCIETY.

Meeting of November 10.

Dr. G. E. Seaman was chosen temporary chairman. There were present 20 members and 4 guests.

Dr. A. I. Comfort presented a case of injury to the elbow with atrophy, from injury to the ulnar nerve. Skiagraph showed no fracture. Dr. Comfort was of the opinion that the nerve was injured, torn, or stretched at the time of injury, as symptoms began almost immediately.

Dr. H. V. Würdemann read a paper entitled "Burns and injuries of the face and eyes from gun-powder and other explosive substances." He brought out the fact that since peroxide had been used to clean up "powder faces" almost perfect cosmetic results had been obtained, and advocated the use of 15% papoid ointment in these cases. He also spoke of the beneficial effects of ammonium chloride in the eye for lime burns. Discussion by Dr. J. S. Barnes who spoke of the use of a 2% Dionine solution for superficial keratitis, and by Dr. G. E. Seaman, who spoke of the paralyzing effect of strong light, electric especially, on the retina.

Dr. A. H. Levings presented a scholarly paper on "Surgical Shock," treating all aspects of the subject in an exhaustive manner. Discussion by Drs. Reineking, Würdemann and Harrington.

Meeting of November 24.

There were present 17 members and 1 guest.

Pres. Burgess appointed Drs. Washburn, Hay and Stoddard a committee to nominate officers for 1903-1904.

Drs. O. H. Foerster and Albert Jenner were elected to active membership.

Dr. L. F. Jermain read an interesting paper on "Cardiac Asthma," reporting three characteristic cases. Discussed by Drs. Washburn and Hay. Dr. W. H. Washburn demonstrated a new differential or double stethoscope invented by Dr. Wetherill, of Philadelphia. Dr. Mishoff reported further on a case of elephantiasis reported earlier before the Society. Dr. L. F. Jermain reported a case of very severe chorea. WILLIAM THORNDIKE, M. D., Secretary.

VEREIN DEUTSCHER AERZTE IN MILWAUKEE.

President, J. Lang; secretary, C. Zimmermann.

At the meeting held November 7th, Dr. A. J. Puls exhibited specimens of the following cases:

Case I. Mrs. S., aged 46, mother of two children, youngest thirteen, complains of metrorrhagia and at times of excruciating pelvic pains and nervousness. On examination of the pelvis the uterus was found to be several times its normal size, also irregular and nodular in its outline, and freely movable; both appendages normal. Abdominal hysterectomy Oct. 6th; speedy recovery. An inspection of the specimen reveals a large uterus which contains in its posterior wall two separate fibroids and a smaller one anteriorly, just above the internal os.

Case II. Mrs. B., aged 26, married two years, sterile, complains of pelvic pains and backache; menses regular and scanty; no previous history of pelvic disease. An examination of the pelvic organs reveals two distinct tumors at each side of the uterus crowding the latter forward toward the symphysis pubis. Abdominal celiotomy Oct. 26th. Pyosalpinx of both tubes. Resection of the right tube together with the ovary, leaving 5 c.m. of the uterine portion of the tube; excision of the left tube which was adherent to the colon and pelvic floor. The left ovary was normal and was not removed. The contents of the right tube were free from liquid, and coagulated, and those of the left tube resembled the mass of a dermoid cyst. Appendicectomy. The appendix was bound down by adhesions and contained several fecal stones.

Case III. Mrs. P., aged 32, married twelve years, sterile, suffers from pelvic disorders and lately has had severe pains in the cecal region. Abdominal celiotomy Oct. 14th. Removal of the right tube and ovary on account of hydrosalpinx and cystic degeneration of the ovary. The left tube was also found closed at its distal end, but by blunt dissection the fimbria were reopened and the lumen of the tube was found patent. The fimbriated portion was sutured with fine silk around its circumference and returned, together with the left ovary, to the abdominal cavity. The abdominal wall was sutured only with catgut, the peritoneum, the fascia and the skin separately. Appendicectomy. The distal end of the appendix was bound down by firm adhesions to the posterior wall.

The convalescence was disturbed by incessant vomiting, causing a rupture

on the fourth day of the abdominal wound, which allowed the escape of a loop of the small intestine. The rent was immediately repaired; after the intestine had been washed with normal salt solution the wound was sutured with silkworm gut and drained at its lower angle. The stitches were removed on the tenth day and the patient left the hospital Nov. 4th, three weeks after the operation.

Dr. C. Reinhard reported a case of fracture of the pelvis, sustained by a teamster who, in getting from his wagon in a barn, was pressed by the horse against a door post. The patient could stand, but not walk. Both rami inferiores of the os pubis were fractured. The pelvis was immobilized by an elastic bandage. After two weeks the man could make the first attempts at walking. From the fourth to seventh day there was hematuria, but without further consequences.

Dr. L. Frank related four cases of lupus vulgaris and erythematodes, treated at first with X-rays without improvement. The latter was at once noticeable after application of Finsen's light, which Frank considers preferable in lupus.

Dr. C. Zimmermann reported two cases; 1st, a cataract extraction he had lately performed on a blind feeble-minded woman over 90 years old, who was very unruly during the operation, and repeatedly tore off her dressings, but made a good recovery. 2nd, opening of mastoid process of a man who had purulent otitis media for three weeks, on account of fever and persistent headache. The mastoid itself was not painful; its inner wall was perforated and led to a perisinuous abscess which was laid upon. While cleaning this, a violent hemorrhage of the sinus transversus occurred, which, however, was at once controlled and did not recur. Now, after four weeks, the wound is almost closed and the ear dry. C. ZIMMERMANN, Secretary.

WILLS' HOSPITAL OPHTHALMIC SOCIETY, OF PHILADELPHIA.

November 1903 Meeting.

Dr. S. Lewis Ziegler showed a most interesting case of double coloboma of the iris and capsular indentations with lenticular streaks and choroidal involvement in their usual situations, in association with microöphthalmos which was more greatly marked on the left side, occurring in a five-year-old girl of good parentage. In addition, there was a pronounced degree of convergence of the two eyes, but without any apparent pareses or palsies.

Dr. Charles A. Oliver exhibited a cured case in a normally functioning eyeball of infectious kerato-iritis with deposits on the anterior capsule of the lens. The patient, a foundry worker of thirty-one years of age, had struck his left eye with a splinter of soft wood, producing an open wound of the cornea through which two pieces of wood had passed into the anterior chamber and rested against the iris, the iris tissue being grossly inflamed and infiltrated. After removal of the splinters of wood and all of the foreign material possible, with careful treatment of the involved parts, the signs of reaction rapidly disappeared, leaving a permanently healthy organ. Bacteriologic examination of the pieces of wood showed a preponderance of pyogenic bacteria.

An example of the comparatively rare condition of suppurative

dacryoadenitis in which the diagnosis had been fully established during the very earliest stages of the disease, was shown by Dr. Ziegler. He also exhibited an instructive illustration of optic nerve atrophy following ocular contusion, the only visible early signs being the presence of a few massings of subretinal hemorrhage situated in the posterior pole.

Dr. Oliver showed the final results of a case of chronic double symblepharon and ankyloblepharon from a hot iron burn, in which he had successfully separated both the lower and the upper lids from the eyeball, giving all their ordinary and proper degrees of motility. The bands, which embraced more than the inner third of both lids and which were fastened directly to the corneal limbus, and which bound the inner fourth of the lid borders together, had been dissected into loose tongue-like flaps, and the adjacent conjunctivae brought together throughout their entire original lengths beneath by a series of fine interrupted silk sutures; the loosened tongues of scar tissue being fixed to the adjoining good mucous surfaces. The operation was divided into two sittings.

Dr. M. Uribe Troncoso of the City of Mexico, being invited to give his views upon the origin of glaucoma, stated quite extensively in detail the findings in his experimental studies upon lower animals, the results of his clinical researches, and his conclusions in regard to the various etiologic factors at play; as well as the prognoses, and the various plans of therapy, in such cases. The want of fibrin, the great amount of albumin, the edema of the vitreal elements with forward pushing of the vitreous body, the secondary closure of the angle of the anterior chamber, etc., all were carefully considered.

In the discussion, Drs. Oliver, Ziegler, and Radcliffe took up the questions of the varieties and stages of the disease complex, the main etiologic factors at work, the gross and the fine pathologic changes, and the relative effects of medicinal and operative therapy.

Dr. Bedell showed a case of dendritic ulcer of the cornea following capsulotomy which had been cured by large doses of quinine used both locally and internally. Upon inquiry, he stated that no bacteriologic studies had been established.

BOOK REVIEWS.

The Principles and Practice of Surgery.—By GEORGE TULLY VAUGHN, M. D., Assistant Surgeon-General, Public Health and Marine Hospital Service of the United States; Professor of the Principles and Practice of Surgery, Georgetown University, Washington, D. C. [J. B. Lippincott Co., 1903., Philadelphia and London.]

This book, which is one of Lippincott's new medical series, contains 570 pages, divided into two sections—General Surgery, and Surgeries of Systems and Regions. The author in his preface states that the object of this volume is to present the subject of General Surgery in the way best adapted for the uses of the general practitioner and student. The first 184 pages constitutes the first section and is divided into 21 chapters, a chapter being devoted to

each subject, as Inflammation, Wounds, Anesthesia, Amputation, Plastic Surgery, Bandaging, etc. The chapters in this section are short, each subject being treated as briefly as possible. For instance, Chapter 16, devoted to Erysipelas, contains but two pages, and that devoted to Tetanus and Hydrophobia but five pages. The bulk of the work is contained in the second section, which is divided into 10 chapters. The first chapter is devoted to the surgery of the Vascular System. The second chapter, The Surgery of the Osseous System, is, we think, by far the best chapter in the work; the subject of Fractures is very clear and concise. The eighth chapter is devoted to Surgery of the Digestive Tract, and occupies 80 pages. It is evident that the surgery of so large a field as this can be only briefly treated in this limited space. The last chapter in the book is on Tumors of the Breast, and contains only 5 pages.

The book is well and carefully written, there being few if any errors in the text. The cuts are good and very numerous, some of which, we believe, could as well be dispensed with. For instance, we fail to see what object, educational or otherwise, is to be gained by devoting a full page cut to depicting the amputation of two legs and an arm of a patient.

For the student who desires to review the subject of General Surgery, such a work as this, which is certainly as good as any of its class, may have a place. We question, however, the use of such a work for the general practitioner. The subjects are too briefly treated to make them clear to any but the surgeon of experience. (H. A. S.)

The Aetiology, Pathology, Diagnosis and Treatment of Tumors.—By A. HAMILTON LEVINGS, Milwaukee, Wis., Cleveland Press, Chicago, 1903.

This very extensive work, treating of almost all known forms of tumors, contains 835 pages which are divided into 26 chapters. The first eight chapters are devoted to general remarks on diagnosis, prognosis, treatment and classification of tumors. They are very complete and full. The remaining chapters of the work treat of the various forms of tumors. A chapter which is complete in itself is devoted to each kind of tumor and gives a very full account of the origin, histology, diagnosis and treatment of the form of growth under consideration. The chapters on Malignant Growths are particularly comprehensive and interesting. The work is profusely illustrated throughout. Most of the illustrations are original and appear for the first time in this work. This volume is well and carefully written and is very readable. It is the most complete work on tumors that has been published in recent years, and should be found in the library of every surgeon as it is most valuable for reference. (H. A. S.)

A Dictionary of Medical Science.—Containing a full explanation of the various subjects and terms of Anatomy, Physiology, Medical Chemistry, etc., by ROBLEY DUNGLISON, M. D., LL.D., late Professor of Institutes of Medicine in the Jefferson Medical College of Philadelphia. New (twenty-third) edition, thoroughly revised, with the pronunciation, accentuation and derivation of the terms, by THOMAS L. STEDMAN, A. M., M. D., member of the New York Academy of Medicine. In one magnificent imperial octavo volume of 1224 pages, with about 600 illustrations, including 85 full-page plates, mostly in colors, with thumb-letter index. Cloth, $8.00, net; leather, $9.00, net; half morocco, $9.50, net. Lea Brothers & Co., Philadelphia and New York.

The name Dunglison has been familiar to medical men and students for over seventy years and as naturally suggests medical lexicography as do the

names of Webster and Worcester suggest general lexicography. Although Robley Dunglison died in 1869, his great medical dictionary continued to appear under the editorship of his son Richard, the volume now before us being the first edition appearing without the aid of a Dunglison. The present editor, Dr. Thomas L. Stedman, has already made a reputation in this line of work by his editorship of the medical terminology of the Standard Dictionary. A great number of new words have been introduced into this edition and a large number of well executed illustrations form an entirely new feature in this volume. The original intent of the author has been carried out in this latest edition—that is—that the work should be more than a mere lexicon or dictionary of terms, and should offer under each word a more or less condensed view of its various medical relations, so that the work should constitute an epitome of the existing condition of medical science.

(W. H. W.)

Studies of the Cortex of the Human Brain.—PROF. DR. S. RAMON Y CAJAL, (*Madrid*). Translated by Dr. Bresler, Kraschmitz. No. 1—The visual cortex. No. 2—The motor cortex. No. 3—The acoustic cortex. No. 4—The olfactory cortex. Leipzig, 1901-1903. Joh. Ambr. Barth. M. 18. $4.50.

Our knowledge of the structure of the cerebral cortex of man and the higher animals is still very small and limited to the very coarse morphology of the body of the neurons The aim of Cajal's work is the anatomical investigation of the minute morphology, the situation and connection of the cell processes, by the methods of Nissl, Weigert-Pal, Ehrlich, Cox and Golgi. R. found in the visual cortex and the other cortical regions common structures which are scarcely, or not at all, modified in spite of the localized functions and corresponding anatomic adaptations, and asserts that this anatomic substratum exerts the same function in the whole cortex. On the other hand, not only the visual cortex, but also the remaining sensory spheres of the cortex, show peculiarities by which they may be recognized at once in good chromo-silver preparations. Thus, the strata of the small and large star cells represent the chief termination of the optic fibers in the visual cortex, from which may be concluded that they are the seat of the visual sensations. The acoustic cortex is recognized by the existence of large horizontal spindle and triangular cells and by the very delicate fibers in the stratum of granules, while the motor cortex is characterized by the preponderance of the plexiform stratum, the multitude of the giant pyramids, etc.

According to R., the olfactory cortex of the human brain is the least developed of all sensory spheres. Even the superficial layer of the plexus of esogenous fibers gives it its appearance of lower animality, reflecting the character of organization of the cortex in the lower vertebrates. This arrest of development is easily conceivable by remembering that the olfactory sense of man is in a stage of atrophy, or at least in a resting condition, in contra-distinction to the other senses, which in man and the higher animals have a progressive tendency to self-preservation.

The vast abundance of new facts the celebrated author presents in this work render its careful study imperative for all who wish to become familiar with the delicate structure of the brain. Print and numerous illustrations are excellent.

(C. Z.)

The Streptococcus and Streptolytic Serum.—Published by the Scientific Department of Frederick Stearns & Co., Detroit, Mich.

This little brochure, for gratuitous distribution to the medical profession, contains a brief outline of the morphology of the streptococcus, and of the method by which the serum is obtained. Then follows a chapter covering the various diseases with citation of cases in which Stearns' Streptolytic Serum has been used and found efficacious, including scarlet fever, tuberculosis, puerperal fever, erysipelas and rheumatism.

CURRENT LITERATURE.

SURGERY.

F. E. Walbridge, M.D., H. A. Sifton, M.D., F. Shimonek, M.D.

Surgical Treatment of Undescended Testicle.— A. D. BEVAN (*Journal Am. Med. Ass'n*, Sept. 19, 1903) describes his operation for the relief of this malformation.

He says the first requisite to the successful issue of this operation is a thorough anatomic knowledge, and considers the operation as one of the most interesting examples of applied anatomy. He speaks of one fact in connection with the descent of the testicle which is of importance in the operative procedure and which is generally not known or is misunderstood, and that is that long before the testicle descends through the canal the vaginal process of peritoneum has preceded it lying in front of the gubernaculum testis, and reaching into the scrotum, instead of the testicle dragging down a process of peritoneum in its descent. He has found in all his cases even when the testicle is within the abdomen, a large sac of peritoneum passing through the canal down toward or into the scrotum.

Undescended testicle occurs in at least 1 to 500 cases, figures obtained from examination of Austrian recruits. This malformation is a serious one, as it is liable to produce both mental and physical distress.

Bevan says that all palpable undescended testicles should be transplanted into the scrotum. Those which can not be palpated should be operated on providing they cause symptoms or are complicated by a hernia, and those cases in which the testicle can not be palpated and cause mental distress only, should also be operated on. He thinks that there are a few cases of undescended testicle in which an operation is not indicated. The dangers of non-operation are mentioned. Bevan says that his operation is as safe and sure as a Bassini hernia operation and more urgently called for (this is open to argument). He advocates interference when possible between the 6th and 12th year, and follows with a description of the operation. (F. S.)

The Treatment of the Peritoneum in Diffuse Peritonitis.— JOSEPH A. BLAKE (*Annals of Surgery*, Aug., 1903) discusses his plan of treatment for diffuse peritonitis. His classification of purulent forms of peritonitis is (1)—Cases with abscess in which there is a localized collection of pus with limiting adhesions; (2), cases with spreading peritonitis in which there is no limitation of the process by adhesions or gravitation, but in which the limits are ascertainable; (3), cases of general peritonitis in which no parts

of the peritoneum, possibly excepting the lesser sac, can be demonstrated to be free from the invasion. He considers a classification based upon the progress and extent of the peritoneal involvement of more importance than one based on the specific nature of the bacterial invasion.

He endeavors to carry out two principles in the treatment of these cases: (1) The removal or segregation as quickly as possible of the cause or *nidus* in order to prevent further peritoneal or systemic infection; (2) the placing of the peritoneum under the best possible conditions to withstand and eliminate the generalized infection. The carrying out of the first principle is understood to mean early operation. His plan is to operate as soon as a patient can be prepared, regardless of the cause of infection, while admitting that there may be a question in cases of appendicitis. The second principle involves two main questions, the cleansing of the peritoneum and drainage. The peritoneum is cleansed by employing large quantities of decinormal salt solution at a temperature of 110° F. In considering the question of drainage he divides his cases into two groups, one in which the focal cause or origin can be removed or eliminated, the other—the remaining cases. To the first group he would assign most cases arising from perforation of the hollow viscera, appendicitis, salpingitis and possibly cholecystitis. To the second group belong those resulting from rupture or abscesses, from pancreatitis and cholecystitis in which cholecystectomy was contraindicated.

He says, "In the first group drainage may not be employed; in the second it is, as a rule, necessary."

In conclusion he says the treatment may be briefly stated as:

(1). Early operation; (2). lavage of the peritoneum with large quantities of saline solution; (3.) closing of the peritoneal cavity without drainage unless the latter is absolutely indicated by the presence of non-absorbable amounts of necrotic material. (F. E. W.)

Deformities, the Result of Fractures and how to prevent them.—JOHN E. OWENS (*Railway Surgeon*, July, 1903) first calls attention to deformities resulting from fractures of the skull and emphasizes the indications for the osteoplastic repair of the cleft by a replacement of the fragments.

In connection with fractures of the bones of the face, he mentions means of avoiding deformities. In the case of fracture of the malar bone with depression of the wall of the antrum, the depressed portion should be elevated even if an opening must be made and an aseptic instrument introduced. Deformities resulting from fracture of nasal bones, may be prevented by immediate replacement by introducing some blunt instrument into the nose, by plugging the nose to prevent re-displacement, and in certain cases by passing a suture pin from side to side through a drill hole or even leaving a small drill *in situ* for two weeks or more. In fractures of the lower jaw the writer advises the use of well annealed German silver wire to hold the parts in apposition.

In complicated fractures in which it is difficult to hold the parts in good position, he is in favor of the open method of treatment by wiring with silver wire or other suture material. In discussing this paper, Dr. C. H. Mayo calls attention to the fact that in a large number of cases which he has treated, he has never yet seen a non-union resulting from suppuration nor from prolonged drainage. This is proof that treating fractures by incision does not in any way endanger or delay union. (H. A. S.)

Traumatic Aneurysm of the Gluteal Artery.—ALAN MUIR (*Lancet*, August 29, 1903) reports a case treated by excision, the hemorrhage being controlled by two fingers compressing the common iliac through an abdominal incision. The circulation was completely controlled and no difficulty was found in excising the aneurysm. A perfect recovery took place. (H. A. S.)

The Surgical Treatment of Colitis. C. L. GIBSON (*Med. Record*, Sept. 12, 1903) describes a method of flushing the colon without making a complete artificial anus. He believes that flushing from below is inefficient and that a complete artificial anus with the prospects of a severe operation for its closure, is unnecessary.

Described briefly, his plan is as follows: "A small intermuscular incision is made over the caput coli. Then, reproducing the technique of the Kader gastrostomy, a catheter is introduced into the bowel through an opening just large enough to admit it. By using two tiers of sutures, the tube is infolded into the caecal wall, absolutely guaranteeing against any leakage, and the bowel is finally secured to the abdominal wall. So perfect is the technique that the irrigations of the colon might be begun at once, but it will be wisest to wait forty-eight hours. After the tube has been in place a week, it is removed, when the essential feature, the artificial valve, becomes operative. For so soon as the tube is removed, the infolded cone of intestinal wall prevents absolutely the exit of intestinal contents. From now on so soon as the patient's strength responds to the beneficial effects of the operation, he can continue the treatment while gradually resuming his ordinary mode of life; for after ten days he can leave his bed. All dressings are discarded, as there is no leakage, and the tube is only required as described."

The further treatment consists of introducing the tube and flushing the colon from two to four times a day, first with normal salt solution followed by gradually increasing strength of silver nitrate. For the permanent closure of the fistula, it is only necessary to omit passing the catheter. The cases so far treated have shown marked improvement from the beginning, not only in the local symptoms, but constitutionally as shown in the gain in strength and weight. (F. E. W.)

The Surgery of Gastric Ulcer—A. B. MITCHELL (*Lancet*, August 29, 1903) reports in detail 18 cases of non-malignant gastric disease operated upon by him. Five of the cases showed hour glass contraction as the result of the chronic inflammatory process in the wall of the stomach. Gastro-jejunostomy was the operation most frequently performed. In one instance an active ulcer was infolded without opening the stomach, a cure resulting. In all the cases that recovered, there being three deaths in the series, the results were most gratifying. The author thinks that cases of gastric disease should not be operated upon until medical treatment has failed. The mortality is between 6 and 7 per cent., but he thinks it can be further reduced.

The results of excision of the ulcer when possible, anastomosis between the two portions of the hour glass stomach, or gastro-jejunostomy, give most gratifying results. (H. A. S.)

THERAPEUTIC NOTES.*

H. D. PETERSON, M. D., CHICAGO, ILL.

Iron in any form acts upon the human system in three ways: First, by increasing the oxygen-carrying power of the red blood corpuscles. Second, by changing the oxygen in the tissues into ozone. Third, by its general astringent effect.

Iron acts not only as a food to the tissues, but is at the same time a stimulant, and by this effect upon the blood-making organs it increases the number of red corpuscles. It also stimulates the heart muscle and slightly contracts the arterioles, in this way increasing blood pressure.

Its general effect is tonic and is therefore very useful in cases of general debility.

It constitutes an important part of the blood, and by diminution of its proper proportion will produce ill effects, as shown, for example, by anæmia. When any such ill results occur we seek to restore the balance by supplying artificially the lacking element. The methods which will nearest approach Nature's efforts are those which recommend themselves as best for adoption. *Gude's* PEPTO-MANGAN *seems to meet the requirements as well as any preparation of iron, as it is nearest to the form found in the blood.* It is a neutral solution of iron and manganese, two well-known restoratives, and recommends itself in that it is easily absorbed by the digestive tract without any disturbance of the same, is not injurious to the teeth, and produces no constipation.

The indications for its use are the same as for any preparation of iron, viz.: anæmia, constipation, dysmenorrhœa, etc. Not every case treated with iron, regardless of the form or preparation used, is brought to a successful termination, as in many such there is some condition which prevents proper action, viz., weak or irritable digestive tract. On *account of its mild action Gude's* PEPTO-MANGAN *acts so well,* these conditions being in themselves indications for iron. The following cases are illustrative of its value as a restorative. In these cases the Thoma-Zeiss hæmocytometer was used to count the corpuscles.

Case I. Ellen C., aged 28, married 5 years. She was confined three months ago after a prolonged, exhausting labor. So much blood was lost that she was left in an extremely anæmic condition. She improved so very slowly that four weeks ago she was placed upon Gude's PEPTO-MANGAN in one-drachm doses, in milk, three times a day. The blood count at commencement of the treatment showed 2,600,000 red corpuscles to one c.m. The first sign of improvement was redness of the lips and better appetite. She soon began to gain in strength and flesh, and one week ago the red corpuscles had increased to 3,700,000 in one c.m. She now says she feels as well as ever, and her appearance would warrant the statement.

Case II. General anæmia in a young girl of 16 years. When first seen she was pale, thin, and was badly constipated. There was almost constant headache and she had but very little appetite. She first menstruated at her fourteenth year but had not been regular for over a year. The corpuscle count was 3,000,000 to one c.m. Gude's PEPTO-MANGAN in one-drachm doses three times a day, in milk, was given for a period covering four weeks. In two weeks after beginning the treat-

*From the *Chicago Medical Recorder.*

ment she began to have some color in the lips, and from that time on rapidly improved in all symptoms, and now has no trouble except with the menstrual function. The blood at last count, one week ago, was 4,000,000 to one c.m.

Case III. Geo. W., aged 27, typesetter. Has not felt well for the past year. Is badly constipated, has a feeling of lassitude, headache most of the time. Poor appetite, tongue flabby, pale, and thickly coated. Blood count 2,800,000 to one c.m. Four weeks of treatment with Gude's PEPTO-MANGAN has caused a marked improvement in his condition. He feels much stronger and can do his work without the fatigue formerly experienced. The appetite is much improved, and his tongue is clear. Blood count now shows 3,600,000 red corpuscles to one c.m.

Case IV. Edward C., age 15, office boy. When first seen he was very thin and pale, lips almost colorless. Complained of shortness of breath and palpitation on hurrying upstairs, as he was often required to do. Gude's PEPTO-MANGAN in drachm doses three times daily caused very rapid improvement. He has gained in weight and color and has more appetite After three weeks' treatment blood count showed an increase from 2,800,000 red corpuscles to 3,200,000 in one c.m. He is still under treatment.

Case V. William H., age 22, student. Family history bad. Father and two brothers died of consumption. About six months ago he began to lose in weight and his color became pale; appetite fair; no cough; no night sweats; slept fairly well; bowels constipated.

He was given Gude's PEPTO-MANGAN in drachm doses three times daily and always in a glass of milk. He improved steadily under this treatment, and is now feeling as he formerly did. He has gained several pounds in weight. Blood count not made.

A physician in speaking of Glyco-Thymoline imitations, remarked that they reminded him of oleomargarine—"which might be used when it was impossible to get butter.

"Imitations are at best poor substitutes and I never use them. I want the results that invariably follow the use of Glyco-Thymoline—genuine."

Sears, Roebuck & Co., Chicago, Ill., whose advertisement appears in this issue, make the offer to mail entirely free of charge, to any subscriber, a copy of their 144-page Surgical Instruments and Physicians' Supplies Catalogue.

THE WISCONSIN
MEDICAL JOURNAL

JANUARY, 1904

THE LYMPHATIC CONSTITUTION.*

BY W. H. SHELDON, M. D.,
MADISON. WIS.

This is a subject about which very little is definitely known, but inasmuch as of late there has been a reawakening of interest in regard to the functions and diseases of the ductless glands, it may not be amiss to call the attention of the profession to what is now known of this phase of the subject.

The frequency of sudden death in children in whom the cause is unknown or apparently due to a trivial cause, is seen particularly in the large cities and in those countries where rickets is most prevalent.

Paltauf, of Vienna, in the two years from 1887 to 1889, collected 127 cases of this nature, most of them occurring in infants during the first year of life. These were only cases in which the death was sudden, without a previous illness of any consequence.

He states that pathologists, making a large number of autopsies, come from experience to recognize a certain complex of findings which is quite constant.

A category of the findings in such bodies would show pallor of the skin, often a pasty complexion; usually considerable panniculus adiposus; organs filled with blood, without special changes in their structure; spleen usually enlarged, showing follicles distinctly; often signs of rachitic proliferation of epiphyses of bones; enlargement in varying degree of lymphatic glands, particularly of thymus, tonsils, retropharyngeal, cervical, axillary and of the follicles at the base of the tongue and of the intestinal walls.

Most of the work on this subject has been done in Germany and Austria, particularly in Vienna, and the condition is there accorded an entity as fully as almost any well-defined disease.

*Read by title at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 4, 1903.

In this country Osler, Ohlmacher, Witherstine and others have described the condition, and Osler, in his last two editions, devotes a special chapter to its description. However, there are numerous pediatrists who do not admit that there is any such condition.

The attention of the profession has for a long time been called to the association of sudden death, particularly in children, with an enlarged thymus gland. These deaths were often entirely unexpected, the children having been apparently very healthy, and many theories have been adduced to account for them.

The older authors devoted considerable attention to a condition occurring in children in which there was dyspnea, spasm of the glottis and sometimes sudden death. Kopp, writing in 1830, and others, designated the disease "thymic asthma," and considered the cause to be hyperplasia of the thymus gland, causing mechanical pressure of the trachea.

Friedleben, in 1858, made observations upon a large number of these cases and he proved that there was no anatomical basis for such a clinical diagnosis. Since then the medical profession has considered "thymic asthma" to be identical with laryngismus stridulus and it has been the generally accepted belief that an enlarged thymus, *per se,* only very rarely causes obstruction of the larynx, and thymic asthma as a disease has lost its entity.

However, some of the most eminent pathologists, Virchow, Cohnheim, Rauchfuss and others, have reported cases in which there was apparently mechanical pressure from the enlarged thymus gland.

In 1896 Siegel reported a case of dyspnea not alleviated by tracheotomy, but cured by an operation in which the thymus was raised up and sutured so as to relieve pressure from the trachea. There are, therefore, undoubtedly cases in which the thymus may exercise mechanical pressure enough to produce dyspnea.

In 1888 Grawitz reopened the discussion by reporting two cases of sudden death in children apparently perfectly healthy up to a few minutes before death, but in whom autopsy showed an enlarged thymus.

From measurements made he again raised the question whether the deaths might not have been due to the mechanical pressure upon the air passages, nerves or vessels. He called attention to the fact that little was known as to the cause of hyperplasia and persistence of the thymus, though Rokitansky had repeatedly noted the association of the same with rickets and general adenopathy. He also stated that pathologists were often at a loss to account for sudden deaths in children. Realizing that there was a break in the knowledge of the path-

ological anatomy of the condition, he urged pathologists to make as careful observations as possible in these cases, particularly as the subject had such importance from a medico-legal standpoint.

Following this paper there were a great many cases reported with the pathological findings, and a great deal of theorizing was indulged in.

The sudden death of the two-year-old son of Langerhans, in 1894, following an injection of diphtheria antitoxin, still further stimulated the discussion.

Before going further into the history of the development of our knowledge on the subject, I will digress to take up some of the anatomical, pathological, and physiological relations of the thymus gland.

As is well known, the organ is a temporary one, which attains its greatest size early after birth, and after the second year gradually diminishes in size until in adult life hardly a vestige remains. The size of the gland varies greatly in individuals normally, and this variation is so great that pathologists have a difficult task to prove a given thymus pathological. This is especially so as the persistent or enlarged thymus shows usually no change in structure, but simply a hyperplasia.

Friedleben gave the average weight of a thymus gland in the first nine months as 20.7 gms., varying in health between 9 and 33 gms.

In regard to the function of the ductless glands it may be stated that they have to do with the regulation of the general metabolism, with the regulation of blood pressure, and serve in the higher organization of the blood.

It is known that there is a certain relation between the thymus and marasmus, and investigations based on a study of 18 cases of infantile atrophy would show that atrophy of the thymus gland is always found in these cases and that the condition of the thymus is an index to the general nutrition of infants.

We know that when the thyroid is removed, loses its function, or, on the other hand, becomes hyperplastic, there develops a peculiar symptom-complex, varying according to the severity of the disturbance and the age of the individual, which is characterized by changes in metabolism, disturbances of the nervous system, etc.

It is possible to draw an analogy between this relation of the diseased thyroid to myxedematous conditions and the relation of the hyperplastic thymus and its co-ordinated lymphatic organs, to the symptom-complex characterized by the general condition known as the "lymphatic constitution."

In these two dyscrasias the influence upon the nervous system would form quite an antithesis, the strumous diathesis affecting the

intellect, causing apathy and even idiocy, while the lymphatic-chlorotic dyscrasia is characterized by a latent condition of irritability of the nervous system.

Here the question arises whether the hyperplastic thymus itself is to be considered as only one of the signs of the general lymphatic dyscrasia, the cause of which is to be sought for further, in possibly a chronic auto-intoxication; or whether the cause of the general adenopathy lies in an insufficiency or abnormality in the metabolic function of the thymus.

Paltauf, of Vienna, was the first to point out the fact that the thymus enlargement was always associated with certain other features and a certain characteristic general appearance, and he advanced the view that the fundamental condition in these cases was to be found in a constitutional dyscrasia.

Advance in the study of the general condition of the status lymphaticus has always been retarded by the undue importance which has always been attached to its most prominent feature, namely, the enlarged thymus. Deaths were charged either to mechanical pressure exercised by the enlarged organ or to some anomaly of its secretion.

According to Grawitz, the space occupied by the thymus, between the manubrium sterni and the spinal column, is only a trifle over an inch, and it has been maintained that when the thymus was large, death in a child might be caused by simply a throwing back of the head suddenly, so causing pressure on the trachea.

It has also been claimed that death could be caused by pressure of the enlarged thymus upon the superior vena cava, or the left ventricle, but here the well known signs incident to pressure exercised upon these vessels, often seen in the case of large mediastinal tumors, fail.

Nordman and König, who have both given this subject considerable attention, have ascribed death to pressure of the thymus upon the large nerves, either the vagus or the recurrent laryngeal, thereby causing paralysis of the heart.

In certain cases one of these theories may appear satisfactory, but no one of them will explain all the cases, and, indeed, often the thymus is only moderately enlarged.

The chief clinical features of the lymphatic constitution are: (1) general lymphatic hyperplasia, especially of the tonsils, adenoids, thoracic and abdominal lymph glands; (2) enlargement of the follicles at the base of the tongue; (3) persistence of the thymus, often to be made out upon percussion; (4) often evidence of rachitis; (5) general neurotic tendencies; (6) often slight enlargement of the thy-

roid; (7) often hypoplasia of the aorta; (8) usually well developed panniculus adiposus.

These children usually appear fat and healthy, though they are very likely to have suffered from rickets, or to suffer from the conditions incident to lymphatic hyperplasia, namely, adenoids, enlarged tonsils, retropharyngeal abscesses, spasm of the glottis, etc. They may appear phlegmatic and quiet, although there is a latent irritability of the nervous system.

Death in these cases, according to the predisposing cause, may be ushered in by dyspnea, coughing, loss of consciousness, etc. The cause of death is supposed to be due to reflex paralysis of the heart.

These subjects have a lessened vital resistance and by reason of their dyscrasia this paralysis may be brought about by trivial causes, which under the influence of this anomalous disturbance of nutrition, act upon the unduly irritable nervous centers governing the heart.

The most common causes as evidenced by the cases reported are: hydrotherapeutic measures; anesthetics; emotional disturbances or fright, often caused by slight operative procedures; slight suffocation; throwing back of the head; violent coughing; and Osler and others have pointed out the fact that such subjects are unusually prone to succumb to the acute diseases.

The connection between such a profound disturbance of the whole nervous system and lymphatic hyperplasia, is at present dark and unsatisfactory, inasmuch as the essential cause of the paralysis of the heart is unknown.

A knowledge of this condition has a practical value in many connections. Although comparatively rare, still it is likely to be present in those children most often subject to surgical operations in connection with adenoids, enlarged tonsils, retropharyngeal abscess, etc.

The danger of giving chloroform in these patients is far greater than in a normal child, both from the liability to reflex shock to the nervous system in light anesthesia and in the danger of paralysis of the heart in anything approaching deep narcotization.

In studying the literature of retro-pharyngeal abscess in infancy, one is struck by the frequency of sudden deaths, sometimes occurring upon the simple insertion of a mouthgag or the throwing back of the head; in other cases upon simple examination with the fingers, etc. In this latter case the deaths have sometimes been ascribed to pressure on the vagus.

In this connection it may be stated that there are numerous cases recorded where the pneumogastric nerve on one side has been com-

pletely severed in opening a retro-pharyngeal abscess and not caused death or any severe shock.

It would seem much more probable, inasmuch as children suffering from retro-pharyngeal abscess have usually as the basis of their disorder an adenitis, that the lymphatic constitution is the most rational explanation of these deaths.

It has also been noted that children suffering with the lymphatic constitution often succumb to the acute infectious diseases, particularly diphtheria, and especial care should be taken to prevent strain upon the heart, where this condition is suspected.

Escherich and others have pointed out the fact that these patients do not stand hydrotherapeutic measures well and particularly has it been found dangerous to subject these patients to prolonged packs.

Further, in these subjects ether would be a safer anesthetic than chloroform. This condition is also a means of accounting for deaths inexplicable in other ways, and medico-legally it has come to have great importance in Germany.

There are constantly cases in court where sudden deaths have been laid to negligence on the part of a nurse or an attendant, in which an autopsy has shown the presence of this dyscrasia, with the consequent removal of the blame from the innocent person.

We should welcome any advance in knowledge which will tend to simplify the general classification of disease, particularly when this can be done upon an etiologic basis.

There are a number of obscure neuroses which have been found associated with the lymphatic constitution, and the theory has been advanced that this is the fundamental pathological basis of laryngismus stridulus, tetany, infantile eclampsia, epilepsy and perhaps rickets.

Dr. F. X. Walls in advancing the above hypothesis, states that in his opinion "it is reasonable to infer that this lymphatic dyscrasia is due to a chronic infection or auto-intoxication, and on this substratum may develop the above enumerated symptom-groupings, which are merely expressions of an identical constitutional diathesis."

Ohlmacher has tried to establish a relationship between the lymphatic constitution and genuine epilepsy. He reported in 1898 eight cases of epilepsy, most of them dying suddenly, in which autopsy showed the characteristic features of this constitutional anomaly.

Remarking on the frequency of finding signs of old rachitis in this condition, he raises several very interesting questions: Does the lymphatic constitution and its associated neuroses depend upon early nutritive disorders? Will prevention of rachitis guard against the

development of the condition? Is the lymphatic constitution a chronic infection? Is rachitis an infectious disease?

While the great majority of the patients affected by this diathesis are young children, still there are many instances among adults.

Nordman, Paltauf, Recklinghausen and others have studied the relation of this condition to sudden death in adults. Nordman reported a case of a young soldier, 20 years old, a good swimmer, who before his midday meal took a swim and after a few minutes came back to the bank, suffered a chilly feeling, became pale, fainted and fell to the ground dead. All efforts at resuscitation were unsuccessful. Autopsy showed dark blood in the organs, no water in the lungs, hyperplasia of the thyroid, tonsils, laryngeal glands, spleen, thymus, and of the follicles of the base of the tongue.

Recklinghausen reported the case of a 13-year-old boy who fell out of a boat, was immediately drawn out, dead. Autopsy showed almost no fluid in the air passages, normal organs, a very large thymus, lymphatic hyperplasia. He also reported a second case of a young man dying in a bathing house directly after a bath. Autopsy showed enlarged thymus, tonsils and general adenopathy, otherwise no abnormality. Also a third case of a similar character in a strong young man, 18 years of age.

Paltauf also reported five similar cases which came under his personal observation, all of them in young adults, in all of which the characteristic findings were observed at autopsy and no other cause of death was demonstrable.

In adults shock from bathing, anesthetics, operative procedures and syncope arising from various causes are the most common causes of death in this condition.

To sum up the deductions I have made on the subject, I would state that:

1st. A condition, so-called lymphatic constitution does exist.

2nd. Sudden deaths are apt to occur in such subjects, such death being due to reflex paralysis of the heart, made possible by an abnormal irritability of the nervous system.

3rd. That the enlarged thymus, usually found in these cases, is only one phenomenon of the general disturbance of nutrition and only in very rare instances causes death by any local pressure either on vessels, nerves or air passages, and

4th. That the condition has importance from therapeutic, prognostic and a medico-legal standpoint.

BIBLIOGRAPHY.

1. Paltauf, A., Ueber die Beziehungen der Thymus zum plötzlichen Tod. *Wiener med. Wochenschrift.* 1889 and 1890.

2. Escherich, Th., Bemerkungen ueber den Status Lymphaticus der Kinder. *Berliner klin. Wochenschrift.* 1896.

3. Grawitz, Ueber plötzliche Todesfälle im Säuglingsalter. *Deutsche med. Wochenschrift.* 1888.

4. Ohlmacher, A. P., The Bulletin of the Ohio Hospital for Epileptics. 1898.

5. Osler. Practice of Medicine.

CONGENITAL TRANSPOSITION OF THE VISCERA DIAGNOSED DURING LIFE AND DEMONSTRATED PER AUTOPSY. DEATH FROM AORTIC ANEURISM.

BY F. C. STUDLEY, M. D.,
MILWAUKEE.

Congenital anomalies of position of the heart and all other thoracic and abdominal viscera, while not extremely rare in medical literature, are yet so infrequent in private practice that but few cases come within the direct experience of most of us; and while the abnormity loses thereby the unusual interest connected with these cases in former times, still each new case is interesting in itself; and this is my only reason for presuming to present the unusual features of this case for your consideration.

The first reported case of Congenital Transposition of the Viscera was made by Petrus Servius of Rome, in 1643. In Paris in 1650, and in London in 1694 similar cases were reported. Up to the present time 234 cases of this variety of abnormity have been reported. Of course this is no criterion of the number of cases which have actually existed, because presumably many cases diagnosed have not been reported, and the majority of those reported have been discovered accidentally in examining for life insurance, a practice which in former times was not so universal as at the present. The anomalies of position which are found ante-mortem are much more frequent in literature than those which are demonstrated per autopsy.

Malpositions of the heart may occur pathologically as the result of enlarged liver, abdominal tumor, pericardial effusion, hypertrophied heart, fluid or air in the pleural cavity, as well as to the shrinkage of one lung, due to tubercular disease. Malpositions also occur congenitally. Of the pathological malpositions this paper will not treat.

The subject of this paper, Mr. Joseph Meyer, a German, forty-four years of age at death, came under my notice in 1895 for examination for membership in a secret order. The condition of complete

transposition of the thoracic and abdominal viscera was recognized at this time, and in the *Medical Record* of Oct. 31, 1896, I reported the case. The apex beat of the heart was between the fifth and sixth ribs immediately below the nipple. Liver dulness was in the left hypochondriac and epigastric regions, and the stomach placed entirely to the right of the median line. Splenic dulness was in the mid-axillary line beneath the ninth and eleventh ribs of the right side. Of course there was no way of knowing ante-mortem whether the ascending and descending colons were transposed, nor whether the lobulations of the lungs were reversed in position.

I presented this case for examination before a class in the Wisconsin College of Physicians and Surgeons of this city in 1896, and before the Milwaukee Medical Society last winter, where my diagnosis was confirmed by all the physicians present.

The patient died on the fifth day of October of this year, after an illness of thirteen hours, death being due to rupture of an aneurism of the arch of the aorta into the pericardium. My endeavors to procure an autopsy were only successful after the patient's burial, when the family reluctantly consented to his resurrection for scientific purposes.

The autopsy was made at the vault in the Union cemetery, Oct. 8, and the following is a report of the condition found:

Rigor mortis marked. A well nourished man about six feet tall, and about 200 pounds in weight, 44 years of age. Chest measurement 40 inches over the nipples. From mid-point of the sternum to spinous process of vertebræ on right side, 20½ inches; same on left side, 19½ inches. No syphilitic scars on body or glans penis. Pupils medium dilated. Cornea opaque. No signs of putrefactive changes.

A longitudinal incision was made from a point midway between the two clavicles downward as far as the pubes, and the skin and muscles on both sides dissected off the thorax as far as the nipple line; the ribs were divided with a costatome, and the entire bony flap lifted out.

It was immediately seen that the heart and pericardium were in the right side of the thorax. The pericardium was incised, and found distended with clotted blood, one quart of which was removed, some of it fluid, and some of a tarry consistency. It was now seen that the heart lay almost completely in the right chest, apex at the junction of the sixth rib with its costal cartilage on the right side. Upper border of the heart was on a level with the third costal cartilages. Left border of the heart was placed one and one-half inches to the left of the left border of the sternum. Right border extended beyond the nipple line. There were no adhesions in the pericardium. The left auricle and ventricle present anteriorly, the left auricle to the right of the sternum, and the right auricle and ventricle lie posteriorly. The aorta lies deeply posteriorly, pointing upward and to the right, crosses over the

right bronchus, and descends in its entirety on the right side of the vertebral column. The innominate, subclavian and carotid arteries were transposed, the innominate arising from the transverse portion of the arch on the left side, and the subclavian and carotid from the arch on the right side. The first portion of the arch of the aorta is in a condition of aneurism, dark and hemorrhagic, almost malignant in appearance. The intima and muscular coat of the first portion of the arch are entirely wanting, a pathological change due to the aneurism. A rent in the wall of the aneurism two inches in extent, extending longitudinally, is found, and is the direct cause of death.

As stated before, the intima and muscular coat of the aneurism are entirely gone, leaving simply the fibrous connective tissue coat

which is thinned like paper over the point where the rupture occurred. Wall of the aneurism feels calcareous and stiff. Aneurism will contain four ounces of water. Pulmonary artery is firmly adherent to the aneurism, probably the result of adhesive inflammation. (1.)

Circumference of the heart is 12½ inches. Longitudinal diameter of heart is 7 inches, and transverse diameter 5 inches. Weight 32 ounces. Since the normal weight of the heart is from 10 to 12 ounces we see that we have here quite an unusual condition of hypertrophy.

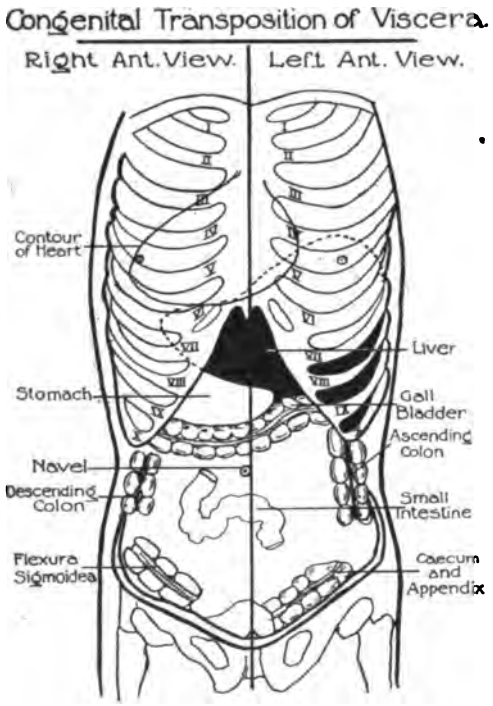
The heart was lifted out and washed. No attempt was made to determine the sufficiency or insufficiency of the valves; but they seem quite thick and swollen with edges of irregular outline. Heart contains a few blood clots of small size.

No adhesions in the pleural cavity; three lobulations of the lung

on the right side, and two on the left side of chest—the normal condition.

Kidneys were normally placed, and the relative position of vein, artery, and ureter was as normally found.

Spleen is situated on the right side of the abdomen in the mid-axillary line beneath the ninth, tenth, and eleventh ribs, its ventral surface embracing the cardiac end of the stomach, which was situated almost entirely in the right hypochondriac and epigastric regions. The tail of the pancreas extended from the hilus of the spleen on the right side of the abdomen transversely to the left, where its head was embraced by the duodenum.



The liver was of normal size, the larger lobe situated entirely within the left hypochondrium, the smaller lobe in the epigastric region. The gall bladder sustains the same relation to the left side of the body as it normally sustains to the right side.

The appendix vermiformis and caput coli are found in the left inguinal region, the sigmoid flexure and rectum in the right inguinal region, the rectum descending on the right side to the middle of the sacrum, from whence its course is normal. The ascending colon is on the left side of the abdomen, the descending colon on the right side, the converse of the normal condition.

Whether the hemispheres of the brain were or were not transposed I do not know; I made no examination, nor do I believe that this matter could be determined post-mortem with our present knowledge, or lack of complete knowledge of localization of brain functions. A great number of these cases of visceral transposition show a condition of left handedness, which formerly was explained by assuming a transposition of the cerebral hemispheres. However, right and left handedness is more a matter of early instruction than anything else, so I cannot see how this matter would have any bearing on the subject. My patient was right handed.

We have then here, a condition of congenital complete transposition of the viscera, the lung lobulations excepted. What is the cause of this condition? "The condition probably arises from, or is connected with some derangement in the position of the whole embryo at the period when the relation of organs is more immediately fixed by the course of their formation." (Dr. Allen Thomson.) In many cases of abnormity of position of the heart, as, for instance, where the heart has been found in the neck, we can assume an arrest of development at a period before the fetus is developed, because the aorta in the embryo is situated immediately underneath the head during the first period of the evolution of the fetus, and the aorta instead of forming an arch descends directly into the chest.

In the case of congenital visceral transposition we cannot assume an arrest of development, but rather a perversion of development, or of the natural order of development, and after we have done this, there is nothing more to say in the matter of explanation of the abnormity, so far as I know.

During life, the symptoms referable to this patient's heart were as follows: Apex beat was between the fifth and sixth ribs of the right side and immediately below the nipple. Heart dulness extended one inch to the left of the left border of the sternum. Aortic and pulmonary sounds were transposed, the aortic heard loudest at the second costal cartilage on the left side, and the pulmonary sound at the second interspace to the right. For the past six months a loud murmur, systolic in time, was heard over the entire right side of the chest, and although cardiac dulness was increased, and aneurism suspected, cardiac hypertrophy seemed more likely, particularly in the absence of the thrill and bruit which ordinarily accompanies aortic aneurism.

For the past seven years this patient had suffered no inconvenience whatever which could be referred to his condition. Occasional attacks of indigestion, with slight headache, were about all that he complained of. He suffered neither pain nor dyspnea. For the past six months

he has complained of precordial pain, dyspnea upon exertion, vertigo, and slight cough with some headache. He never suffered from dropsy, never used tobacco or intoxicants to excess. Patient was of an unusually excitable disposition, and an enthusiastic card player, strong and muscular, and given to the practice in earlier years of showing off his great strength, exactly the kind of make up in which we might expect an aneurism to develop and grow gradually worse because of the sudden and unexpected strains which are put upon the heart and arteries from increase of blood pressure.

On the afternoon of October 4th patient was playing cards. He had had one drink of whiskey. About 7 p. m. he complained of pain over the heart, walked to his bed, and fell down, immediately becoming insensible. I saw him a half hour later; he was unconscious, tossing restlessly from side to side of his bed, talking incoherently, breathing with difficulty in an irregular stertorous manner. He was pulseless at the wrists and carotids. Hands were cold and clammy. The heart beat was faint and irregular. I administered strychnin, digitalis, and nitroglycerin hypodermically, after which the pulse and breathing improved. About 10 p. m. he became conscious and rational, complained of great headache, and cried out with the pain. I administered morphine sulphate gr. ¼, after which he slept until 8 a. m., when he again grew restless and suddenly died.

The cause of death was, of course, the rupture of the aneurism into the pericardium. I have already stated that I removed a quart of blood from the pericardium at the autopsy. The accumulation of blood in the pericardium exceeded the limit of pericardial distensibility, and the heart was mechanically stopped. It became practically drowned in its own blood.

A casual glance at the literature of cases of transposition of the viscera, shows that a large percentage of these cases suffer from aneurism, death being sudden. The reason for this I have not been able to determine definitely; but I have no doubt that the unusual twist of the arch of the aorta exposes it unusually to the dilatation which an hypertrophied heart exerts, particularly when we have a condition of atheroma present, as in this case.

It was not possible in this case to diagnose aortic aneurism positively. Still, I am somewhat surprised to learn that this patient was accepted by a prominent life insurance company as a good risk after examination by five of their medical staff, less than six months ago, notwithstanding the fact that at this time he had a loud murmur over the entire area occupied by the heart, and with the subjective symptoms which he presented.

ALBUMINURIA IN THE APPARENTLY HEALTHY.*

BY WM. H. WASHBURN, M. D.,
MILWAUKEE.

Ten years ago I read a paper before this Society on the "Diagnosis and Prognosis of Albuminuria in the Apparently Healthy." The conclusion then reached in the matter of prognosis was that the mortality rates were considerably greater than among non-albuminurics and that such a result was to be expected in view of the fact that under no circumstances could albuminuria be regarded as a physiologic process. The last ten years has produced a literature of considerable bulk bearing on this subject which has been approached from every side, that of diagnosis, of prognosis, of treatment, of pathogenesis, so that at the present time we are perhaps in a better position to utter some opinions than we were a decade ago.

As to the diagnosis, it may be said that no case can properly be considered one of "Albuminuria in the Apparently Healthy" in which any other evidences whatever of disease are present. If in addition to the albuminuria there are also tube casts, or if there is an excessive secretion of urine of habitually low specific gravity, then the case is not one of "Albuminuria in the Apparently Healthy." I feel confident that many of the writers upon this subject have included cases in their lists which by this standard did not belong there.

In my former paper, already alluded to, in the consideration of the prognosis, a number of cases were included in which tube casts were present, in which cardiac lesions were found, in which vesical calculi were present, and one in which there was an extreme irregularity and intermission of the pulse. Manifestly these were not cases of "Albuminuria in the Apparently Healthy," although up to the time of my examination of the cases there were no subjective evidences of ill health.

As to the prognosis there is much to be said, and it is especially to this aspect of the question that I desire to direct your attention. I think that the general trend of opinion has been and is that albuminuria is a grave prognostic, that is, that the mortality among albuminurics is three or four times greater than among non-albuminurics. In a recent discussion of this subject, Vander Pool, of the New York Life Insurance Company, stated that in his opinion, if cases were carefully watched, it would appear that the mortality is four or five times greater than the normal, and that albuminurics seldom live

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 4, 1903.

more than half their expectation of life. Lambert, of the Equitable Life Assurance Society of New York, did not appear to take quite as dubious a view of the question, and thought that if the albuminuria was transitory it might be of no significance, but that if it continued it might eventuate in true kidney degeneration. Tessier does not think cyclical albuminuria is liable to pass on into Bright's disease, although of 28 cases observed by him for periods ranging from 9 to 13 years, four developed it. Huger also thinks that although a small minority of these cases may develop Bright's disease, the majority get well, even though tube casts may have been present. He regards the presence of tube casts as of less diagnostic and prognostic significance than vascular changes and amount and specific gravity of the urine.

I now have the records of 7,500 uranalyses made between June 1, 1886, and January 24, 1903. These analyses were all made in the course of life insurance examinations, and they were accordingly persons presumably healthy. Albumin was found in 258 of these cases —which would make the percentage of albuminurics 3.44. This is a lower percentage than has been reported by others, and in view of the fact that one of the companies for which I am acting as medical examiner is doing a substandard business and therefore often receives applications from persons known to be albuminurics, this would seem to be a rather low rate of incidence of the abnormality. The tests used have been heat and acetic acid, boiling the upper portion of urine in the test tube so that a faint haze in the boiled portion can be readily recognized. I am, of course, aware that if some of the finer tests were used, such as picric acid by contact, a larger number of cases would have been regarded as albuminurics, but the heat and acetic acid test is more satisfactory than the finer tests because there is less liability of error in interpreting results.

Of the 258 albuminurics, 35 presented other evidences of disease, such as cardiac murmurs, tube casts, cystitis, vesical calculus, or some other evidences of impaired health, so that they are to be excluded entirely from the discussion before us. I may, however, add parenthetically that of these 35 cases, 11 are now dead. Of the remainder 70 have been entirely lost sight of, many of them having left the city, so that there remain 153 whose subsequent history is pretty definitely and fully known.

Of these six have since died. The deaths resulted from the following diseases: Two from pulmonary tuberculosis, one and three years after the examination, the ages being respectively at the time of death 25 and 45 years. One died of pneumonia, four years after the examination, aged 63 years. One died of paralysis about ten years after

the examination, aged about 63 years. One died of acute Bright's disease four years later, aged 30 years. The other case ended fatally four or five years later, cause unknown, age about 49 years. There was a very marked tubercular family history in this case, and I strongly suspect that the cause of death may have been pulmonary tuberculosis.

The history of these cases extends over a period ranging from a few months to 15 years. It is, of course, difficult to determine just what mortality rate would have been normal among these 153 men, and the best I can do is to approximate the rate in a rather crude manner. The average age of these 153 cases was, at the time of the examination, 40 years. They might, therefore, be expected to furnish a mortality rate of 9.7 per thousand per annum, or for the 153 cases an annual mortality of about 1.4. If now we average the years that have elapsed since the original examination we can suppose that they all have a record of seven years and accordingly might have supplied about nine or ten deaths. As a matter of fact, however, only six deaths have occurred and this is below the expectation of the American Experience table. If we include the other 35 cases and draw conclusions from the results thus obtained the outcome would be quite different. In that event the annual mortality rate would be 1.81 for the total number, 188, and for seven years the total expected deaths would be 12 or 13, whereas the total actual deaths have been 17, which is considerably in excess of the expectation according to the American Experience table. As stated earlier in this paper, it would appear that the inclusion of cases presenting other evidences of disease than albuminuria has somewhat clouded the question of general prognosis.

The subsequent history of the 147 remaining cases is, and will continue to be, an interesting study. Of these 47 have had a history extending over a period of more than six years, and 100, six years or less. Of the 47 cases with a history in excess of six years, 13 are living, in good health and known to have recovered from albuminuria; 10 are apparently healthy, the urine having continued albuminous; three are in poor health, two having contracted tuberculosis and one having developed an organic heart lesion; the remaining 21 are in apparent good health, but the condition of the urine is not known. Of the 100 with a history extending over a period less than six years, 14 are known to be still suffering from the condition, although otherwise apparently healthy, and the remaining 84 are living in apparent health, but the present condition of the urine is not known.

The case with the longest history is a man now 81 years old, in apparent perfect health, in whose case albumin was found over 15 years ago.

So far then as a study of these cases would warrant any conclusions at all they would be in the direction of a less unfavorable prognosis than has generally been entertained during the past ten years, it being always borne in mind that no other evidences of impaired health than the albuminuria must be present in cases considered under the classification of "Albuminuria in the Apparently Healthy." As to the treatment of these cases there is not very much to be said.

I have had quite a large number of these cases under observation and treatment, some of them for periods of eight or nine years. I have pursued various lines of treatment, sometimes based on general principles, attempting to improve the patients' general health by the administration of such drugs as iron, quinine, arsenic, and strychnia, and by attention to the general function of organic life, and again based on the proposition that some local disturbance existed in the kidneys themselves. The lactate and bromide of strontium have been tried in a number of cases. Urotropin and salol have been tried in many cases and iodide of potassium has been prescribed somewhat promiscuously.

Some of the cases have been treated by other physicians and they have generally been put upon a rigid diet such as would be prescribed for a fully developed case of renal cirrhosis. As a result of all this the conclusion seems forced upon one that as yet we have no means by which the incidence of albumin in the urine of otherwise healthy people can be favorably influenced.

Many of these cases were extremely anxious to remove the only obstacle to securing a life insurance policy, and willingly co-operated in the treatment of their cases, and I, on my part, have been very anxious to secure the desired end.

I am, however, compelled to admit that the results of treatment have been most discouraging. After several months or years of treatment the patients become careless, or disgusted with continued and ineffectual treatment, and finally give it up entirely. A considerable proportion of the cases, however, as my records show, ultimately recover, but this has in no case appeared to me to be due to any treatment instituted, but rather to the *vis medicatrix naturae*.

Von Leube thinks that albuminuria may de due to unusual porosity of the renal filter in healthy persons, there being according to him three degrees of this porosity: 1st, that which allows albumin to pass in normal conditions, there being no predisposing factors; 2d, that which does not allow albumin to pass through under any conditions; and 3rd, that which does not allow albumin to pass in ordinary circumstances, but under stress of unusual exertion or emotion does per-

mit it to pass. He thinks this class is larger than has hitherto been supposed, and he does not regard this albuminuria as of any prognostic significance and therefore asserts that there is no occasion for, or sense in treating such cases.

These remarks concerning treatment do not have reference to the albuminuria of adolescence, which should receive general hygienic, dietetic and tonic treatment.

Discussion.

DR. C. E. ALBRIGHT, Milwaukee—The subject of Dr. Washburn's paper has been very interesting. Of course my study has been entirely from a life insurance point of view, but I am well satisfied that this paper constitutes a valuable contribution to the study of the subject. The doctor is to be congratulated on being able to continue his observations for so long a time. I have realized in the course of my work how difficult it is to induce these subjects to continue these observations. I find that they lose interest in a short time, and it is almost impossible to continue the observations for more than a few months at a time.

The widely different views expressed by Dr. Vander Poel and Dr. Lambert regarding the prognosis of this condition indicate how much at sea regarding these manifestations are those who have given much time and attention to the study of the subject. Moreover, a review of the literature of albumin in the apparently healthy will force the conclusion that other members of the profession are unable to agree regarding the significance of this condition. As Dr. Washburn has pointed out, volumes have been written on the subject, and cases have been studied at length, but we are still unable to arrive at any definite conclusions regarding the prognosis of albumin in the apparently healthy in any given case. Of course we can definitely affirm that the existence of albumin in a multitude of apparently healthy individuals will shorten the average duration of life, but we cannot select any individual from the group and predict that his life will be shortened by reason of the fact that albumin exists. The medical director is frequently called upon to state the cause of the existence of albumin in given cases, and it is not always possible for him to give answers that are satisfactory to himself or those making the inquiries. I think, however, that we can feel practically certain that the integrity of the epithelial lining of the glomeruli and uriniferous tubules is the principal factor which prevents the albumin from passing into the urine. It follows, therefore, that any circulatory disturbance, whether the result of hyperemia or anemia, may give rise to this condition.

For many years after Dr. Bright first published his paper describing that disease of the kidneys now universally known as "Bright's disease," the prominent symptom of which is albuminuria, the majority of the members of the medical profession regarded the presence of albuminuria as positive evidence of nephritic disintegration, or inflammation of an incurable character; but since that time a closer investigation of the subject has modified our views, and for some time some of the members of the profession have believed that occasional albuminuria is purely physiologic.

Traces of albumin may temporarily be met with in many individuals, particularly after severe muscular exercise, cold baths, mental labor, severe

emotions, during menstruation, digestion, etc. The so-called physiologic albuminuria seems to occur mostly in young adults, and is usually of brief duration, there being nothing else abnormal, that is, the urine is normal in amount, specific gravity and composition, and free from abnormal morphologic constituents, such as casts, red corpuscles, leucocytes and epithelial cells, the persons, furthermore, being entirely free from subjective or objective abnormalities.

On the other hand, the existence of a physiological albuminuria is denied, and the appearance of serum albumin regarded as pathologic in every sense. In support of this view of the case, it may be pointed out that severe muscular and mental labor, severe mental emotions, cold baths, etc., can hardly be regarded as physiologic stimuli for all persons.

Da Costa has pointed out the existence of albuminuria associated with oxaluria. In my judgment many cases of so-called albuminuria of adolescence may be attributed to this cause. Leube found albumin in 19 out of 119 soldiers after a march. Ninety per cent. of foot-ball players are said to exhibit albuminuria after an ordinary game, and 80 per cent. show hyaline casts. The chief factor in the production of this type of albuminuria is prolonged muscular contraction and consequent rise of blood pressure. The attitude of insurance companies towards these cases represents in a practical way the progress which has so far been made along these lines. All companies except those which insure so-called under-average lives, decline to accept those who are suffering with albuminuria, while albumin is actually present. The companies writing under-average insurance accept these risks on modified forms of policies, when albumin and hyaline casts are the only symptoms. The so-called liberal companies accept those who have had albumin, provided two examinations at intervals of two weeks each, fail to show the presence of that body. The conservative companies accept those who have had albumin, provided from six to twelve examinations have been made at intervals of two weeks each, which fail to disclose the presence of albumin, if no other abnormalities of any nature whatsoever exist.

According to the literature of the subject in hand, the preponderance of evidence seems to be against the hypothesis that albumin is ever strictly physiologic. My own experience, though small as compared with that of many others who have made investigations in this field, shows that after observing more than 225 cases of albuminuria in the apparently healthy, I have been unable to convince myself that the albumin in a single one of these cases occurred under strictly normal conditions.

In referring to the 225 cases of albumin in the apparently healthy, I would say that they are not made according to the classification made by Dr. Washburn. I have simply called all of my cases apparently healthy, because they were cases of albumin without subjective symptoms.

Dr. WASHBURN (closing)—I do not care to say anything except that I would not have it understood that I supposed or believed that albuminuria is ever physiological, for I do not. There is, of course, a good deal of discussion of that subject at the present time, but I think that more attention should be devoted to the study of each case, so that grave pathologic conditions may be excluded in reaching individual prognosis.

VESICAL CALCULI—REPORT OF 15 CASES.*

BY REGINALD H. JACKSON, M. D.,
MADISON, WIS.

In a brief paper on the subject of Vesical Calculus it is only possible to barely mention the various predisposing and exciting factors.

1. Age—Children are especially liable to the formation of uric acid calculi. The uric acid being in feeble combination with the alkaline bases is liberated by an excess of acid of any sort in the urine, and unites with the vesical mucus forming the nucleus of a calculus.

In old men the presence of an enlarged prostate, cystitis, with alkaline residual urine, furnish the conditions favorable to the formation of phosphatic calculi around any nucleus which may be present, such as a uric acid concretion, foreign body, blood clot, string of mucus, etc. In a trabeculated bladder a heavy phosphatic deposit may easily form in one of the little cul de sacs.

Sex: The absence of obstructive disease, and the comparative infrequency of vesical disease naturally render women less liable to this condition than men.

Race: Negroes are comparatively infrequent subjects of this disease.

Diathesis: The general conditions which favor the formation of an excess of urinary deposits are naturally predisposing factors in the formation of urinary calculi, viz., lithemia, gout, and allied conditions of disturbed metabolism.

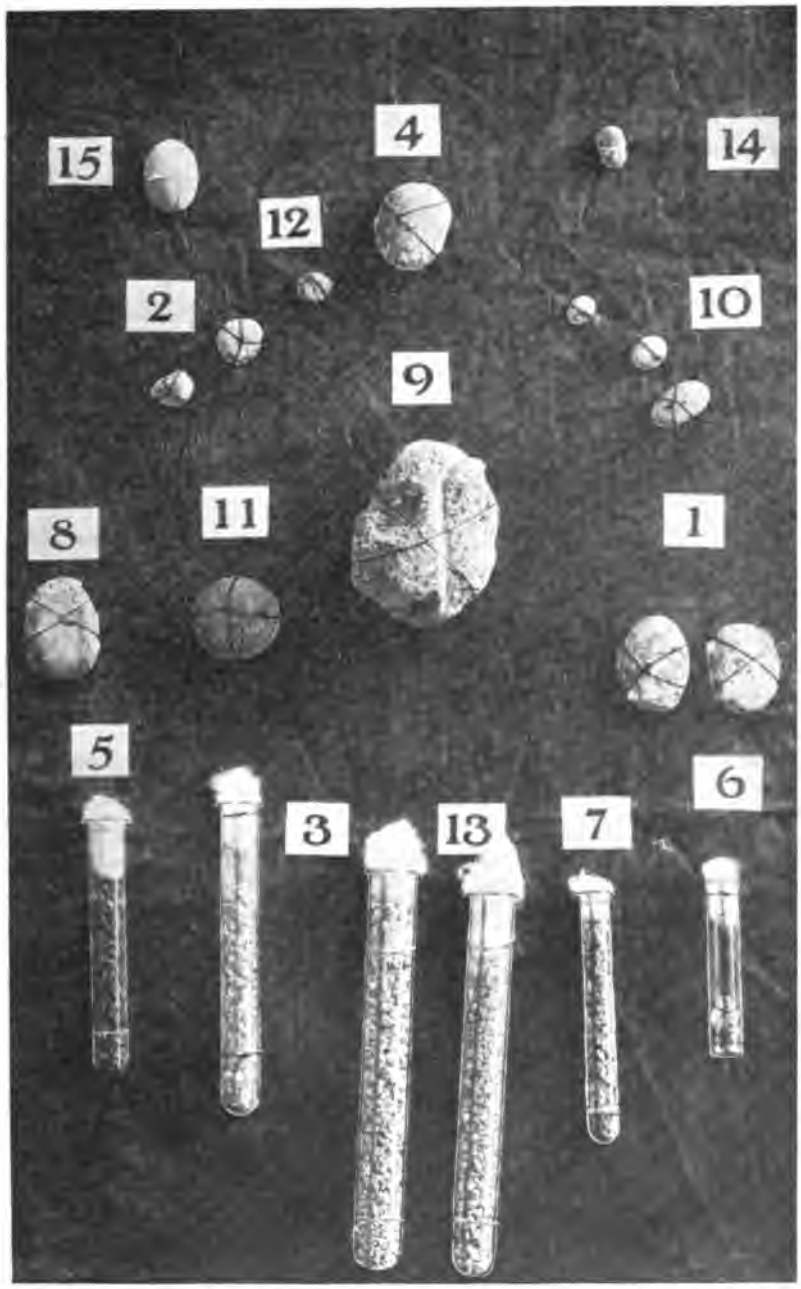
Obstructions to the normal escape of urine predispose to calculus formation. Of these the most important is prostatic hypertrophy, with consequent accumulation of residual urine which undergoes decomposition, forming ammonia salts and carbonates. Also stricture of the urethra and vesical atony.

Mucus: Any catarrhal condition of the kidney, ureter, or bladder which increases the amount of mucus, increases the liability to the formation of a nucleus.

Foreign bodies: The presence in the bladder of foreign bodies, tumors, etc., provides a suitable nucleus for a calculus formation.

Vesical calculi may be composed of urates, phosphates, oxalates, carbonates; rarely cystin, xanthin, etc. According to their composition calculi may be soft and friable, or dense and hard, smooth or rough, single or multiple. They vary in size from a pin head to

*Read before the Central Wisconsin Medical Society, Madison, July 28, 1903.


15
4
14
12
2
10
9
8
11
1
5
6
3
13
7

several inches in diameter, and may be single or multiple, round or faceted.

Position: The most frequent location is at the base of the bladder to which they naturally tend to gravitate and become adherent. They may, however, be found adherent to any part of the bladder wall, or loose and movable.

SYMPTOMS. In brief the typical symptoms are:

Frequent, painful micturition. The desire to empty the bladder is sudden and irresistable and is aggravated by movements of the body which tend to agitate the calculus, such as jolting over rough pavements, riding, etc. It is more frequent during the day than at night, the patient then being in a recumbent position and the stone quiescent. In prostatic enlargement the frequency of urination is most marked at night. A small, freely movable stone would be more potent in this regard than a stone that is large, smooth and adherent.

Sudden stoppage of urination. This is occasionally caused by the temporary lodgement of the calculus at the internal meatus (ball valve action).

Pain. The pain caused by vesical calculi is naturally dependent upon the amount of irritation of the sensitive vesical mucosa, and varies with the size, movability and roughness of the individual calculus. As a rule it is excruciatingly sharp, darting and paroxysmal in character, being greatly increased at the end of micturition, when the contraction of the bladder produces a greater approximation of the sensitive mucosa with the surface of the calculus. The pain is both local and referred to various parts, the so-called typical pain being a sharp darting pain in the head of the penis. Reflected pains may also be present in the rectum, perineum, thigh, scrotum, etc.

The urine. The condition of the urine varies. In the case of a smooth encysted calculus it may be normal. In cases where the irritation of the calculus or infection has incited a cystitis the urine indicates it. Occasionally a fragment of the calculus may be passed in the urine per urethram.

Hematuria. Very frequently the presence of the calculus causes a sufficient trauma to result in a hemorrhage from the abraded mucosa. Hence hematuria is one of the classical symptoms of vesical calculus. In many cases it is absent. In others it is only present during the early period of the trouble, the bladder later becoming more tolerant, or the calculus encysted, and this symptom disappearing. As a symptom taken alone it counts for little; but in conjunction with other corroborative symptoms it is strongly indicative of vesical calculus.

In a given case with the above symptoms one could be reasonably

sure of a correct diagnosis, but frequently pathognomonic symptoms are only present to such a degree as to make us suspicious of the presence of a calculus.

In all cases it is necessary to pass a stone searcher and attempt to demonstrate by touch and sound the presence of the calculus before resorting to operative measures. This is generally easy, but occasionally a case occurs in which, although reasonably sure of the presence of a calculus, we are unable to demonstrate it by the ordinary procedures. In such cases the use of the evacuating searcher, which by its sucking action causes the stone to strike its end with an audible click, is of great aid. Of late the cystoscope has rendered great service in the diagnosis of obscure cases and incidentally has demonstrated the presence of many unsuspected calculi.

TREATMENT. The diagnosis once made it remains to adopt the best measure for the removal of the calculus. I will not mention even to condemn the various medicinal measures which have been in vogue since the days of the ancients.

In a certain number of cases, where the calculus is soft and friable in character, the urethra patent and the urine not indicative of a severe cystitis, its removal can be satisfactorily accomplished by means of the lithotrite and Bigelow evacuator. When there is a marked cystitis it is better to perform a perineal lithotomy for bladder drainage and rest. This also usually holds good when there is a deep stricture of the urethra or prostatic obstruction.

When a large, hard calculus is present many operators prefer the suprapubic route. Others prefer the lateral or the median perineal, if necessary crushing the calculus and removing it piecemeal. Either method is satisfactory in appropriate cases.

As a rule when the operation is made before the patient passes into that extremely bad general condition into which unfortunately so many of them are allowed to fall before an operation is thought of, the results are very gratifying. Occasionally, either the operator has been so elated over the removal of a calculus as to neglect carefully looking for others, or they have formed subsequently and had to be removed at a later operation.

When a calculus has been encysted in the bladder wall for some time there is apt to remain after its removal a chronic ulcer-like patch, which is prone to give rise to trouble for a long time and occasionally terminates in an epithelioma.

A differential diagnosis must occasionally be made between vesical calculus and tuberculosis of the bladder, or a new growth. This can generally be satisfactorily accomplished by the use of the cystoscope and microscopical examination of the urine.

The following brief histories and specimens are from cases occurring in the practice of my father and myself.

Case 1. Male, age 82. History indefinite: has had bladder trouble for many years. For past two years has had frequent (every half hour), very painful micturition; frequent hematuria. The patient was in an extremely low general condition from old age, loss of rest from the frequent attacks of pain, which were so severe that when the presence of the calculus was satisfactorily demonstrated to the family by the audible click of the instrument they begged for an operation even though he should succumb during it. A grooved staff was passed, some 4 per cent cocaine solution injected into the perineum, and everything being in readiness, a few whiffs of chloroform were given and two calculi quickly and satisfactorily removed through a lateral lithotomy wound. The patient rallied nicely and in a week's time was in good condition. (Specimen No. 1.)

Case 2. Male, age 62. For several years has had symptoms of prostatic obstruction. During the past two years frequent attacks of excruciating pain in the bladder and penis with hematuria suggested the possibility of stone. For several months the patient has been unable to void his urine and it has been necessary to pass the catheter frequently. Urine shows marked cystitis. Patient has been taking large doses of morphine for some time. On rectal examination the prostate was not enlarged appreciably. The stone searcher detected the presence of a stone. A median perineal lithotomy was made. Immediately there was found at the neck of the bladder an intra-vesicular prostatic growth which swung back and forth in the internal meatus with a ball-valve action and accounted for the symptoms of obstruction without enlargement of the prostate per rectum. As it was attached by a narrow base it was easily removed without any hemorrhage. Two calculi were then removed from a pouch at the dome of the bladder. The convalescence was somewhat protracted owing to the prolonged drainage of the bladder which was necessary and to breaking the opium habit which he had acquired. At the present time, three months since the operation, he is in fair condition. (Specimen No. 2.)

Case 3. Male, age 20. Typical symptoms of vesical calculus. Frequent painful micturition, hematuria. Stone easily found with searcher. Urethra free, urine clear. Under chloroform, litholapaxy performed with very satisfactory result, patient doing regular work in ten days. No return. (Specimen No. 3.)

Case 4. Male, age 18. For about a year patient had been under treatment for supposed tuberculosis of the bladder. History elicited frequent, painful micturition, hematuria. General condition extremely low. Marked emaciation. The diagnosis of stone could have been easily made by passing a sound, but the attending physician did not think of it. Lateral lithotomy under chloroform. Specimen No. 4 removed. Early and permanent recovery.

Case 5. Male, age 45. History of poor general health, indigestion, occasional attacks of severe renal colic. Frequent painful micturition, occasional hematuria. Patient found gravel in urine. Cal-

culus easily found with searcher. Litholapaxy under chloroform anesthesia. Stone easily found and crushed with Bigelow's apparatus. Three months later another small stone was crushed and removed without general anesthesia; since then perfect health. This case illustrates the possibility either of not thoroughly removing the fragments by litholapaxy or the probability of another stone forming owing to lack of drainage of the bladder when this method is used. This is one of the disadvantages of the method as compared with the open operation. (Specimen No. 5.)

Case 6. Male, age 65. History incomplete. Urinary difficulty running back many years. Called on account of retention of urine. Patient in very bad condition. Complete retention. Swelling in subpubic and perineal regions indicating rupture of urethra and extravasation of urine. External urethrotomy, deep strictures, stones found in a periurethral pocket. Numerous incisions made in surrounding parts liberating foul urine. Patient died two days later from septicopyemia. Earlier recognition of the trouble in this case with proper operation would have resulted more favorably. (Specimen No. 6.)

Case 7. Male, age 70. History of symptoms of prostatic hypertrophy for some years, cystitis, frequent painful micturition, especially at night. Examination showed enlarged prostate. No calculus found at examination. Perineal cystotomy with partial prostatectomy, no stone found after careful search. Patient improved to a certain extent, but three months later was again suffering from frequent, painful micturition and with occasional hematuria. Stone easily found by searcher and removed by median lithotomy. Permanent recovery. (Specimen No. 7.)

Case 8. Male, age 70. Has had bladder trouble for past 12 years, evidently due to prostatic hypertrophy. For past year had frequent attacks of severe pain in bladder with hematuria. The patient had passed into a marked septico-uremic condition, but the attacks of pain were so frequent and severe that he begged for relief. The presence of a large stone was easily demonstrated by the click of the searcher. The prostate was markedly hypertrophied and it was thought best, considering the size of the stone, to remove this by a suprapubic wound and to deal with the prostate later if he rallied sufficiently. The kidneys were in bad condition and he died three days after the operation in uremic coma. (Specimen No. 8.)

Case 9. Male, age 65. For several years patient had suffered from cystitis, passage of gravel in urine, occasional attacks of hematuria. For a year previous to examination patient had been in a sanitarium at Oconomowoc under medical treatment. On examination it was evident that the patient had but a few hours to live. The finger in the rectum felt a large hard mass in the region of the bladder, and the searcher seemed to be passing into a stone quarry. At the autopsy a few hours later the specimen was removed. It was very soft. Notice the channel running from one ureter to the internal meatus. I am able to present this rare specimen to the society through the kindness of Dr. Crosse, who performed the autopsy. The specimen weighs over nine ounces.

Case 10. Male, age 65. Had been under treatment for three years for cystitis. History elicited that he was subject to attacks of frequent, painful micturition, accompanied by hematuria. During past year his general health had deteriorated markedly. He presented a small duck-shot sized calculus which he had found in the vessel after one of the attacks of hematuria. The prostate was not appreciably enlarged per rectum. The stone searcher grated over a rough projection at the base of the bladder which was thought to be stone. Under chloroform anesthesia a median lithotomy was made and the largest of the three specimens, labeled No. 10, removed. It was only after careful and prolonged search that the two smaller stones were found embedded in the bladder wall and removed. The patient made a splendid recovery. The concomitant cystitis rapidly yielded to irrigation and drainage as soon as the exciting cause was removed.

Case 11. Male, age 18. Patient gave a typical history of the symptoms of a vesical calculus. Frequent, painful micturition, with hematuria, for past year. Pain most marked in the head of the penis. Stone easily found by the searcher. Lateral lithotomy under chloroform, permanent recovery.

Case 12. Male, age 60. Stricture of urethra for several years, with gradually increasing frequency of micturition with paroxysms of pain referred to bladder and penis. No appreciable hematuria. Found patient with acute retention of urine, severe pain in penis and constant desire to urinate. Specimen No. 12 was found impacted behind the stricture, which was located about three inches from the external meatus. An internal urethrotomy was made and a large sound passed. On its removal the stone came out with great force. Permanent recovery.

Case 13. Male, age 22. Had been treated for two years for cystitis. A very tight, impassable stricture was found four inches from meatus. Small urinary fistula in perineum. General condition bad. Chloroform anesthesia. External and internal urethrotomy. Two small calculi were found impacted behind the stricture. On entering the bladder its base was found covered with a handful of soft phosphatic stone, which was easily scraped away. (Specimen No. 13.) Permanent recovery.

Case 14. Male, age 40. Patient came to office with acute retention of urine. History of slight previous urinary symptoms with occasional sudden stoppage of micturition. Urine drawn by a metal catheter, which accidentally betrayed the presence of a small calculus. The bladder was filled with a boric acid solution, and a 30 French sound passed and left in situ for half an hour. On withdrawal of sound a large stream was passed in which was found Specimen No. 14.

Case 15. Male, age 60. For past two years patient had suffered from rapidly increasing frequency of micturition with paroxysms of pain referred to bladder and penis, accompanied by profuse hematuria. Urine indicated marked cystitis and nephritis; there were numerous granular and epithelial casts. Specimen No. 15 easily detected by the searcher. General condition bad. Chloroform anesthesia; suprapubic incision. Patient died a week later from uremia.

I think the lesson to be learned from these cases is that we should never be content with the diagnosis of cystitis which in reality is often only a symptom of prostatic hypertrophy, vesical calculus, or neoplasm, disease of the ureter or kidney. Too many cases are allowed to pass into a hopeless condition before the correct diagnosis is made and the proper treatment instituted. The large size attained by some of these calculi and the long periods during which these sufferers were treated for cystitis, is a sad commentary on our diagnostic ability. And yet the diagnosis is not so much a matter of special skill in a large number of cases as it is of simple and thorough examination. As regards the choice of operation, from my past experience I certainly prefer the perineal to the suprapubic route when feasible. It has proven satisfactory in every case and allows of thorough irrigation and drainage. When advisable, and it often is in old people, the patient may be up in a few days and is not obliged to lie in his own urine for several weeks, as is often the case after the suprapubic operation.

DIAGNOSIS AND TREATMENT OF SOME OF THE INFLAMMATORY CONDITIONS OF THE EXTERNAL EAR.*

BY GILBERT E. SEAMAN, M. D.,
MILWAUKEE.

I will not attempt to discuss all of the inflammatory diseases of the external ear described by authors in this branch of surgery. Were I to do so, the proper limits of my paper would be greatly exceeded and I fear that I might be led into the discussion of matters in which you have no great interest. I will, therefore, confine my remarks to those forms of disease with which I have most frequently come in contact in practice, and which I believe are of most concern to the general practitioner.

Inflammatory diseases of the external ear present the same general features as do similar disease processes elsewhere. The lining of the external auditory canal being continuous with the skin of the outer parts, the reason for the similarity of the diseases of both is apparent. Such diseases affecting the external ear, may be primary or secondary, localized or diffuse, acute or chronic, and present all the varying degrees and forms of the inflammatory process in the skin. Some authors have spoken of catarrhal inflammation of the external auditory canal. It is difficult to understand what is meant by such a term, when one

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 4, 1903.

has gotten into the habit of regarding a catarrhal inflammation as one affecting a mucous membrane. We can only say that the external canal is subject to inflammation, and that sometimes the skin only is affected and at other times the disease involves the cartilage, periosteum and bone as well. The skin of the canal being continuous with the tympanic membrane and mucous lining of the middle ear, these structures are sometimes involved in an inflammation having its origin in the external ear.

These inflammations are said to be primary when they depend upon no other condition, and secondary when they are dependent upon inflammatory conditions elsewhere, and localized when boils or abscesses appear. If the area involved is not circumscribed, as in a boil or abscess, but involves a larger surface or the entire canal, the term "diffuse inflammation" is applied.

The skin of the external auditory canal gradually merges into the tympanum, so that it is not an uncommon thing for extension of inflammation to take place with perforation of the drum and infection of the middle ear. This takes place more frequently in the diffuse than in the circumscribed form of inflammation. Cases of suppurative middle ear disease with mastoid abscess and all the other complications of such conditions, have arisen in this way. Taking all these possibilities into consideration, these conditions which are frequently regarded as unimportant, become matters of real interest.

Furunculosis of the auditory canal is a frequent form of circumscribed inflammation, and it is difficult at times to assign any sufficient cause for the condition in a given case. It frequently appears in persons who are below par generally—victims of Bright's disease, diabetes, gout, uric acid diathesis, and all conditions of lowered vitality; it is often dependent upon errors in diet, and not infrequently results from direct infection independent of any of the above conditions, through the medium of irritation in the act of scratching and cleaning the ears, or during the course of a purulent otitis media.

Furuncles are, of course, dependent upon the presence of a pyogenic micro-organism, generally the staphylococcus pyogenes aureus or albus which gains entrance to the deeper layers of the skin through the hair follicles or glands.

Boils, being, as they are, inflammation of hair follicles or surrounding tissue, are most frequently situated in the region where there are the most follicles, *i. e.*, on the floor of the canal close to the meatus in the cartilaginous portion of the canal; but the canal has hair follicles and glands close up to the tympanic membrane, so that no portion of the canal entirely escapes. Boils give rise to great pain

as a rule, but when situated near the external orifice, the pain is not so great as when they appear deeper in the canal. The reason for this is self-evident: the tissues near the outer orifice are less dense, less resistant, there is more room for swelling, so that the nerve endings are not subjected to the same degree of pressure. The swelling at times is considerable, and may be sufficient to block the meatus, and a view of the drum is almost impossible. The hearing may be much affected, which, however, improves as the swelling subsides. The gland in front of the auricle may be involved and swollen, and such cases have been diagnosed as mumps. There may be a single point of infection, or several, and they are as a rule easily seen on examination as prominent elevations protruding into the meatus, but may be so small as to escape detection at first unless upon the introduction of the speculum the sensitive spot is touched and in this way the site revealed. After a few days of the symptoms above detailed, the formation of pus occurs. If not opened the boils rupture and discharge, and resolution or partial resolution takes place. In the latter event other boils occur and the suffering of the patient is repeated. Boils in the ear are peculiarly liable to occur in crops, and it is well to have the patient understand this.

As to the treatment of the condition, it is largely a matter of general hygienic management. Any influence which may act as a causal factor must be eliminated. Such necessary measures must be determined by the peculiarities of each individual case.

Locally, early incision should be resorted to. This is at times extremely painful and should be done if possible under local anesthesia. If there is pus it will be evacuated and gotten rid of; if not, local depletion is beneficial; counter-irritation back of the ear gives relief, as do leeches in front of the tragus. Hot antiseptic fomentations, and when discharge takes place irrigation with very hot antiseptic solutions are useful. Tincture of iodine applied directly to the furuncle serves well in the early stages. Menthoxol or 10 per cent. menthol in oil applied on cotton tampon under considerable pressure will often serve to disinfect the deeper parts and thus cut the trouble short. The tampon may cause some discomfort for a short time, but soon becomes comfortable. After cleansing the canal with peroxide or some other suitable antiseptic solution I have used ointment of nitrate of mercury one drachm, to one ounce oil of almonds, painted over the whole surface of the canal, with good results. Argyrol 50 per cent. applied on a pledget of cotton has given good results. These measures of antisepsis combined with the proper general treatment above alluded to, will generally bring about the desired result. But the disinfection

must be thorough and the deeper tissues involved in the process must be reached by the treatment.

Abscesses in the external auditory canal are more rarely met with than boils, and require much the same care and treatment as abscesses elsewhere. As symptoms, we have those which are common to localized inflammation, pain more or less severe, lasting 24 to 48 hours. After the first day or two the meatus is often swollen in its entire extent. The whole external ear may be congested, swollen, tender. Pain is increased on movement of the jaw, deafness corresponding to the amount and extent of swelling. If not checked, symptoms will increase in severity for several days. On examination with a probe it may be possible to locate one point which will be more acutely sensitive than any other, and this is generally the site of the abscess, and if the disease has progressed far enough fluctuation may be felt. It is not always possible, however, to see or make out the exact location of the abscess.

The abscess having been located, it should be incised at once, cleansed and treated antiseptically on general lines, and locally; I may say the remedies recommended for use in furuncles have yielded good results in my hands. It is, however, important not only to search for the cause which is at the bottom of these conditions, but to inform the patient of the possibility of recurrence.

Diffuse inflammation of the external canal may appear in an acute or chronic form, but one condition passes so gradually into the other that such a division is often of little consequence. Children are particularly liable to be affected with this trouble following one or other of the acute exanthemata. The condition is often neglected because the symptoms are not so urgent as those in the more painful affections of the external ear. However, when we consider the possibility of middle-ear disease from this cause, by infection and extension, it becomes a matter of considerable importance. This affection may be due to getting cold water into the ear, repeatedly. Sea bathers are often affected. It may be due to infected wounds or irritation from hardened wax.

As symptoms we find itching, the canal becomes red, swollen, tender and painful, depending upon the intensity of the inflammation. If very severe and there is considerable swelling, the ear is unduly prominent, standing out from the head. These symptoms increase in severity for a few days, when perhaps a serous discharge takes place and they subside to be followed by desquamation.

The treatment should be in accordance with the symptoms and should consist of hot antiseptic fomentations during the acute stage.

avoiding forcible syringing or much handling, thorough cleansing of the canal, local depleting measures, and attention to the general health where demanded. The common practice of the laity of filling the ears with all kinds of rancid oils, poultices, etc., should be discouraged. After cleansing the canal well, a simple zinc oxid ointment, or ointment of the yellow oxid of mercury gently rubbed into the tissues and protection with cotton, is all that is demanded.

When the inflammation is subacute or becomes chronic, as it will do if neglected, there is more or less narrowing of the meatus, due to inflammatory thickening, and there may be left an eczematous condition which will demand a somewhat different line of treatment.

Eczema is one of the most frequent diseases affecting the skin of the external auditory canal, and like eczema elsewhere is often slow to yield to treatment, principally for the reason, I believe, that the treatment is not thoroughly and persistently carried out. Eczema appears as an acute or chronic affection, the acute form being most common in badly fed or overfed teething infants, and the chronic form appearing most frequently in adults. Eczema affects the ear in all varieties of the disease, and presents the same symptoms as when it occurs in other parts. It would seem hardly necessary to enumerate them; they are varied and depend upon the variety and stage of the disease. The drum may be affected by extension and the hearing considerably interfered with. It may have its primary seat in the ear or be secondary to the same process in other parts of the head and face, or be dependent upon a chronic discharge from the middle ear.

The treatment must be selected largely in accordance with the indications in a given case, with reference to the variety and stage of the disease. The number of remedies recommended for eczema of the ear is legion and the very number is a sufficient indication of the fact that the treatment of the disease is not on as satisfactory a basis as could be desired. There is no specific for eczema. The few suggestions for treatment that I have to make shall, therefore, be limited to those measures that I have found useful in practice: attention to the various hygienic considerations, to the general health, and regulation of the diet, in short, the relief of any condition which might act as a source of irritation is of first importance. Regulate the bowels by the use of salines, exhibit tonics where required. The cure of eczema in nursing infants is often purely a matter of proper feeding.

As to local considerations, avoid the use of soap and water to the parts. Thoroughly remove the crusts and cleanse the canal. Remedies applied over the accumulations of the disease are useless. To cleanse the canal I remove what debris it is possible to remove by the use of

forceps, then remove the rest by the use of peroxide of hydrogen or a solution of sodium bicarbonate with a cotton carrier, and afterwards apply the remedy.

I have obtained good results in many cases from the use of the ointment of yellow oxid of mercury, one to two grains to one drachm of vaseline and lanoline. I have repeatedly used oil of ergot applied directly to the surface with the best of results. I find that this remedy is little known and little used, but I am convinced of its efficacy as a local application in eczema of the ears at least. I have lately used a 50 per cent. solution of argyrol in several instances with satisfaction. Where the condition is one of sluggishness and a sharp stimulant is demanded, I find nothing better than the pure tincture of iodin. Where there is a profuse serous discharge, it will be necessary to make use of a dusting powder, and I have found nothing to answer the purpose as well as the stearate of zinc with balsam of Peru.

These few remedies are not suggested in the belief that they meet the indications in all cases, nor with the assertion that they are the only measures worthy of consideration, but rather as some of the means which have done good service.

Discussion.

DR. CONKEY, West Superior—I consider diseases of the external ear extremely important for many reasons. One important one is the danger of mistaken diagnosis with diseases of the middle ear.

To the general practitioner there is often great difficulty in making an accurate diagnosis in diseases of the ear. One reason for this is the failure to thoroughly clean out the external auditory canal. It is important that the canal be thoroughly cleansed, and this requires a great deal of pains—a great deal of persistent cleansing because there is a tendency for the canal to become blocked with exfoliated epithelium, dried wax, and pus, and this is removed with great difficulty. Until the canal is cleansed a good view of the membrana tympani cannot be obtained. So simple a disease as furunculosis, we would think, would rarely be mistaken for a deeper trouble, but this mistake often occurs. Furunculosis, considering its benignity, is one of the most annoying diseases which we are called upon to treat. It is a disease that is trifling so far as danger to life is concerned, and yet it is a most painful and persistent thing, continuing sometimes for weeks. I have just been treating a case that ran for six weeks. One crop of these little boils followed another in quick succession. Lancing them gave only temporary relief; they would break out in a new point in a few days, and it has thoroughly tried my resources, and I think every aurist finds that these cases are extremely trying. We resort to all sorts of remedies and then generally give the case up in disgust, but there are certain things to do that I think are indicated, that bring us good results. One of those is thorough antisepsis. My plan is, as the doctor has suggested, to thoroughly cleanse the external canal, and apply some antiseptic application, generally a strong solution of carbolic acid, and keep it applied several times during the day, so that there

will not be a chance for re-infection of the surrounding parts and for new boils to spring up. For soothing applications I have used a suppository composed of cocoa butter, containing a little cocaine and morphine, introduced into the ear, and keep constantly renewing it, and in addition to that I find that a ten per cent. solution of menthol in oil is very soothing; it is also antiseptic, and has a tendency to abort the disease, to a certain extent.

DR. G. A. HEIDNER, West Bend—Furunculosis is a disease that every general practitioner has had something to do with, and the fact that we have so much trouble in preventing a successive crop of these boils in the ear is worthy of consideration. The doctor restricted his remarks on that subject entirely to the local treatment. I think that in the majority of those cases, at least so far as my experience goes, the local treatment will be much more effective if it is joined with constitutional treatment. A succession of boils in any part of the body is certainly a case for constitutional treatment, and I do not see any reason why boils in the external auditory canal should not receive the some attention in a general way that boils do in any other part of the body.

I presume there are a great many physicians here who would be interested to know just how Dr. Seaman uses the local anesthetic and what he uses.

DR. SEAMAN—I have very little to say in conclusion. In answer to the question that Dr. Heidner asks respecting the use of local anesthetics, I may say that I have not found any local anesthetic that has given me as good results as cocaine. It is necessary if you expect to get complete anesthesia to inject as a matter of course. This is a painful procedure and yet, if the boil or abscess is a deep-seated one, it is not so painful to inject as it is to plunge a knife down to the seat of the difficulty without an anesthetic. I have at times used a very strong solution of cocaine applied on a pledget of cotton and kept closely applied to the skin for a while, but this I have to admit is unsatisfactory. Sometimes you can make use of the freezing method, the chloride of ethyl, if the site of the disease happens to be pretty close to the external opening.

Respecting general remedies in furunculosis this is, as a matter of course, as stated in my paper, of prime importance. I did not go into the exact measures which are to be taken, because that would cover a very wide field. The condition of the patient which is at the bottom of the difficulty, should be taken into consideration, and the remedies that are indicated should be applied in any given case.

As to the use of local remedies, I may state that I agree with Dr. Conkey, that you get some anesthesia, or rather a benumbing of the sensation, and you do at times get what seems to be an aborting of the furuncle by the use of menthol.

I may say that my attention has been drawn to the point of proper feeding in the treatment of eczema in infants, and I have known several cases of eczema in nursing infants where the chief measure of treatment was the regulation of the diet of the infant, the proper modification of the milk.

The use of the oil of ergot was suggested to me several years ago by a gentleman here in the city who had used it for nearly 20 years in the treatment of nearly all forms of eczema, with good results, and where I have used it it has never failed when combined with proper cleansing measures, in eczema of the ear.

ETHYL CHLORIDE AS A GENERAL ANESTHETIC.*

BY F. PFISTER, M. D.,
OF MILWAUKEE.

During my European trip last year, combining pleasure with professional pursuits and studies, I happened to take a sojourn of several months at Innsbruck, the capitol of Tyrol, in Austria.

In the surgical department of Prof. Dr. v. Hacker, of the University faculty, to which abundant surgical material from all parts of Western Austria is furnished at government expense and where in marvelously equipped operating rooms a considerable number of surgical operations of the most varied kinds are performed day after day, I was struck with the comparatively frequent application of a novel anesthetic, which seemed to me deserving of special attention, *viz.*, Chloride of Ethyl, that I had heretofore personally used and seen applied only as a local anesthetic. True, I had read in medical journals of its application for general anesthesia, but I had so far not had an opportunity of witnessing the mode and effect of its application in so wide a range as I found it used in this place. Greatly interested in this new anesthetic, I was glad to find out that I was at the fountain head of the new uses to which it was put, for Prof. v. Hacker and his assistant, Dr. Lotheisen, are, although not the inventors, yet the first systematic and extended users of ethyl chloride, as medical journals repeatedly testify.

To acquaint those of my colleagues who have not had the opportunity of learning the mode of application of ethyl chloride as a general anesthetic, with its action, I propose to report shortly my observations on this useful drug. Let me observe in advance that the experiences I am going to relate are in strict harmony with those of other physicians who made use of ethyl chloride as a general anesthetic, as for instance, Spengler, Kocher, Ludwig, Ware, Girard, etc. The statistical material on ethyl narcoses extends over 30,000 cases and is sufficient to corroborate the applicability and draw the lines of the usefulness of this drug.

To use it with success it is strictly necessary that the narcotic be chemically pure, *i. e.*, that not the least trace of methyl chloride be permitted to be mixed with it. For eliminating this risk Prof. v. Hacker uses the preparation known to the profession under the name of Kelene; hence the Innsbruck technical qualification of "Kelene Narcoses," instead of Ethyl Chloride Narcoses.

Failures and accidents that have been reported by some surgeons,

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin. Milwaukee, June 4, 1903.

as *e. g.*, insufficiency of the narcoses, alarming symptoms, etc., must be largely attributed, as Ware has shown, to the impurity of the drug or the faulty method of administering it. This does not imply that Kelene is the only pure preparation of ethyl chloride. But Kelene offers another advantage, inasmuch as it is sold in graded receivers, provided with spray nozzles, that may be opened and closed at will and are entirely under the control of the anesthetizer.

What struck me most in my personal experience with Kelene at Innsbruck, was the quick result both in inducing narcosis and in the return to consciousness after the expected period of anesthesia, and besides the absence of all those unpleasant by and after-effects of ether and chloroform anesthesia, as mental excitement, dizziness, vomiting, etc.

Unfortunately, ethyl chloride narcosis is to be limited to minor surgery. The muscular system, especially in adults, is not entirely relaxed, and the expense of prolonged narcosis forms a rather big item. Still, some patients have been narcotized with ethyl chloride for a full hour, so that amputations, resections, herniotomies, etc., were completed under this anesthetic.

In cases where a patient had suffered a great loss of blood, where shock had been severe, or where the condition was otherwise unsatisfactory so that the excitement stage of the ether and chloroform narcosis had to be circumvented, ethyl chloride as a preliminary anesthetic answered the purpose admirably. In no case of ethyl anesthesia that I attended at Innsbruck could I see any untoward incidents follow its application, though I admit that surgeons have reported unpleasant consequences in particular instances from this drug. Naturally, experience in the administration of this anesthetic plays as important a rôle as it does with ether and chloroform. I witnessed only two cases in which anesthesia could not be completed; the patients were addicted to alcohol and were strong robust men.

The administration of ethyl chloride is performed as follows: the patient is prepared as for common anesthesia with ether or chloroform. The dress is to be loosened, the stomach preferably empty. A cone, like that used in the nitrous oxide narcosis, is made to fit tightly to the face so as to cover nose and mouth. The cone's funnel end is closed with a double layer of gauze, upon which the spray is directed. Dr. Ware, of New York, improved this device by fitting over the funnel end of the cone, another detachable cone which holds the gauze taut like the net work of a sieve. The nozzle of the spray tube is held about seven inches from the gauze and the administration is done at short intervals, until about 5 c.c. have been evaporated. This is the usual

amount necessary for anesthetizing adults and requires not more than from 20 to 90 seconds. When the effects are sufficient to commence operations, the spray is continued sparingly, care being taken not to let the patient return to consciousness; 5 to 10 c.c. are sufficient for an anesthesia lasting from 6 to 10 minutes. The pupillary and conjunctival reflexes are all that need ever to be watched. The contraction of the pupils is a sure indication of complete anesthesia. Dilatation of pupils must be taken as a danger signal. The respiration during complete anesthesia is accompanied with slight stertor. Cyanosis and mental excitement remain absent. There is no vomiting, no headache, oppression or other unpleasant symptom. Alcoholic subjects are best given a hypodermic of one-fourth grain of morphine prior to taking the anesthetic. As a rule patients leave the operating table without any unpleasant sensation.

The absorption of heat following the evaporation of ethyl chloride does not affect the respiratory tract in the least; hence there is not any danger from irritating cough or sneezing.

Thus far, but one death could be definitely attributed to the new anesthetic, and this was rather traceable to a degenerate condition of the arterial system. A few other scattered cases of deaths were due rather to wrong methods of application and impurities of the anesthetic than to the drug itself.

The general trend, from observations hitherto made, justify the conclusions that chloride of ethyl is a reasonably safe anesthetic, decidedly safer than the common anesthetics ether and chloroform, and superior to them in that it never causes vomiting, retching or headaches, etc.

Compared with nitrous oxide ethyl chloride is much favored on account of its greater convenience and comparative inexpensiveness, and because of the cyanosis and muscular rigidity following the use of the latter.

Bromide of ethyl, though similar to the chloride in action, is more liable to cause retching and vomiting and besides leaves a rather unpleasant taste.

In summing up, the following points may be taken into consideration when selecting ethyl chloride as a general anesthetic:

Age. Chloride of ethyl is efficient in all ages; it is preferable for younger subjects, especially for children and adolescents.

Indications. It is preferable in minor surgery, removal of tumors, cleansing and suturing of wounds, opening of abscesses, in dislocations, in rhinological and laryngological surgery, and dentistry, where the erect posture of the subject may be easily maintained throughout the operation.

Contra-Indications. It is contra-indicated in all major operations requiring a total muscular relaxation for a comparatively indefinite time and where expense is a material item (midwifery, rectal and abdominal surgery). Lowered vitality is of less consequence than with other anesthetics.

Exciting Stage. Usually absent. Vomiting and retching are usually absent, both during and after narcosis.

Pulse. Slight acceleration without rise of blood pressure. *Respiration.* Not affected, if air is not entirely excluded. Stertorous breathing is light, and there is never any choking sensation. *Cyanosis* is absent. *Salivation* is absent. *Kidneys, heart and lungs,* not affected.

Duration and Quantity. 5 to 10 c.c. will produce anesthesia of as many minutes' duration.

Assistance. No particular training is necessary as is the case with ether or chloroform.

Expense. Slightly higher than with ether or chloroform, but immaterial in short operations.

Success of Anesthesia. 90 to 95 per cent. are successful. Failures occur in adults only.

Safety. Time and frequency of application of this anesthetic permit of no positive assertions: all who have had long experience with it claim that it is safer by far than either chloroform or ether.

Discussion.

DR. THIENHAUS, Milwaukee—I believe that we cannot let this paper go bye and in silence endorse what the doctor has said. I understand Dr. Pfister to say that Prof. Kocher recommends ethyl chloride as a general anesthetic. I must challenge the doctor on this statement because Kocher in his latest edition of surgery does not only not recommend it but rejects it absolutely, stating that he had very bad results from its use.

On the other hand Lotheisen has recently collected seven deaths among 17,000 cases of narcosis with ethyl chloride. He analyses the seven deaths and tries to prove that six of them were not to be attributed to the anesthetic, but were the result of other causes. But I have hardly any reason to believe the other surgeons who state that, in their opinion, the anesthetic had something to do with the death of the patient, less than I would Lotheisen, when he states that this is not true.

In general I would like to make the statement that the value of this anesthetic has not been proven definitely by specialists, and so long as this has not been done (in fact the statements in regard to the value of the anesthetic disagree to a great extent), it is hardly justifiable to lay the old reliable anesthetics, such as chloroform and ether, chiefly the latter, aside and try this new one, and to recommend it for general use. It is very often advisable to follow the old advice, "Be not the first, by whom the new is tried: nor yet the last, to lay the old aside."

DR. PFISTER—What I have reported here is what I have actually seen and what I have been told by those at the place I have mentioned.

Before accepting Dr. Thienhaus' statements, I would like to read the articles quoted, for, as a matter of fact, we often find that young gynecologists, even with the best of intentions, are more or less over-enthusiastic in their reports of cases and figures.

WISCONSIN MEDICAL JOURNAL.

OFFICIAL ORGAN OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A Monthly Journal, published by the Wisconsin Medical Journal Publishing Co., and owned by and devoted to the interests of the Medical Profession of this State.

Original articles, Clinical notes, Correspondence, and Communications of interest to the Medical Profession are solicited. Reprints of articles contributed to this Journal will be furnished at cost price, but a number of copies of the Journal will be furnished contributors gratis. All manuscripts should be typewritten.

ARTHUR J. PATEK, A. B., M. D., Editor,
121 Wisconsin Street, Milwaukee.

Associate Editors.

CHAS. S. SHELDON, M. D., Madison. OTTO H. FOERSTER, M. D., Milwaukee.
HOYT E. DEARHOLT, M. D., Milwaukee. ALBERT W. MYERS. M. D., Milwaukee.

Collaborators:

Horace M. Brown, M. D.,	Milwaukee	U. O. B. Wingate, M. D.,	Milwaukee
Arthur J. Burgess, M. D.,	"	Chas. Zimmerman, M. D.,	"
Richard Dewey, M. D.,	"	Frank H. Edsall, M. D.,	Madison, Wis.
Louis Frank, M. D.,	"	W. E. Fairfield, M. D.,	Green Bay, "
Walter Kempster, M. D.,	"	Wm. E. Ground, M. D.,	W. Superior, "
William Mackie, M. D.,	"	Julius Noer, M. D.,	Stoughton, "
Solon Marks, M. D.,	"	Chas. W. Oviatt, M. D.,	Oshkosh, "
P. H. McGovern, M. D.,	"	L. H. Prince, M. D.,	Palmyra, "
Gilbert E. Seaman, M. D.,	"	H. Reineking, M. D.,	Milwaukee, "
Wm. H. Washburn, M. D.,	"	W. T. Sarles, M. D.,	Sparta, "

Annual Subscription, - - - $2.00. Single Copies, - - - - - $0.20.

Address all business communications to
M. M. TAYLOR, Business Manager,
709 Herman Bldg., Milwaukee, Wis.

CHICAGO OFFICE:
J. L. McKENNA, Commercial Nat. Bank Bldg.
175 Dearborn Street.

Vol. II. JANUARY, 1904. No. 8.

EDITORIAL COMMENT.

CENTRAL LABORATORIES FOR PUBLIC INSTITUTIONS.

It is gratifying to note that there appears to be a gradual awakening to the fact that laboratory and other scientific work has in the past been much neglected at the public institutions for the insane in this country; and that at least in some instances efforts are being made to remedy this deplorable state of affairs.

Some years ago the State of New York established a central laboratory for its state institutions, and from a scientific point of view it has met with a considerable degree of success.

The State of Iowa now has the question of establishing such a laboratory under serious consideration, and judging from the progress recently made by this state in the line of providing for its unfortunate insane, we have every reason to believe the matter will be dealt with in an intelligent manner.

The central laboratory is a departure from the old established idea of having the laboratory in direct connection with the hospital, and its development will be watched with a considerable degree of interest by those engaged or interested in hospital work. We question the advisability of this somewhat radical innovation and believe that the best results will continue to be obtained by a close association of hospital and laboratory. Neither is complete without the other. Clinical and laboratory work are too closely allied to be divorced successfully; and being separated it seems that one or both must suffer.

At any rate, if a state should decide to adopt the plan of a central laboratory, it would appear to be good policy to have this laboratory in direct connection with one of its hospitals for the insane in order to avoid being hopelessly committed to a plan which may prove undesirable in the end.

INTRAVENOUS INFUSION OF SILVER COMPOUNDS IN THE TREATMENT OF STREPTOCOCCUS INFECTION.

The antiseptic properties of silver and its compounds have long been recognized and extensively utilized for their local effects. Credé some years ago introduced the ointment bearing his name, and while the success of his method has not been such as to give it a firm foothold among the profession, yet it has been extensively used and considered highly beneficial by many.

Very recently attention has been directed to the silver compounds as systemic remedies in cases of streptococcus infection. Two recent publications on the subject report each a series of cases thus treated. While the results are not altogether convincing, yet the observations are of sufficient significance to warrant further trial and an unbiased investigation of the method. One thing seems to have been fully established, and that is the harmlessness of the treatment, at least so far as immediate effects are concerned.

Joseph Hume (*Medical News,* Nov. 21, 1903) reports at the Johns Hopkins Hospital Society a series of ten apparently hopeless cases of pyogenic infection treated by intravenous infusion of 500 c.c. of a 1 to 10,000 aqueous solution of nitrate of silver, at a temperature of

110 to 115° F. All but one recovered, and in the fatal case death was due to an intercurrent infection:

Warren Coleman (*Medical Record*, Nov. 21, 1903) reports five cases of erysipelas of all grades of severity treated by intravenous injections of 5 to 10 c.c. of a 1% aqueous solution of colloidal silver. In three cases one injection was made, in the other two cases it was repeated once. All recovered promptly.

These reports warrant further investigation and trial of the method, and encourage the hope that valuable and definite results will soon be realized along these lines.

THE NEED OF A DETENTION HOSPITAL FOR MILWAUKEE.

The needs of a highly civilized and enlightened community tend to become ever more specialized, and this fact is nowhere better illustrated than in the care of the sick, and the varied accommodations they require. We have general hospitals, isolation hospitals, maternity hospitals, children's hospitals, insane hospitals, emergency hospitals, and many others.

But still another hospital for another class of sufferers is now and has been for some time needed, as all medical men of any considerable experience will agree. We refer to a *detention hospital* for the temporary care of persons alleged to be insane, victims of mania or melancholia, suicidal, homicidal, hysterical, epileptic, delirious or stuperous cases, sufferers from accidents, or even from alcoholism, narcotic poisoning, etc. who have no home or if they have one, are in such a state that they cannot be suitably cared for there, and who are at present often found helpless in the street and thrown into the jail or the police station, or if sent to an ordinary hospital are summarily cast out or sometimes cast themselves out of the third or fourth story windows, thereby furnishing a "case" for the coroner. Such persons, guilty of no crime or offense against the community, should not be herded with malefactors and criminals as is done at present; they are sick persons and need kindly and intelligent care and nursing, sometimes only for a few days or hours. Such persons occasionally die from preventable causes or the lack of proper care in the jail or the station house.

A city like Milwaukee furnishes a large number of such cases in the course of a year, and it is not creditable to our enlightenment and humanity that the jail or the city lock-up should receive them.

Other cities have organized and provided for this need. New

York has its famous "pavilion" at Bellevue, Chicago has a detention hospital with resident physician and trained nurses, Albany—a smaller city than ours—has an admirable "psychopathic ward," and numerous other cities are far in advance of Milwaukee in this respect.

This subject has long been the object of earnest attention in Milwaukee. In 1897, Dr. W. F. Becker read before the State Medical Society a "Plea for Temporary Detention Quarters for the Alleged Insane," and a committee from the State Society was appointed to labor in this worthy cause. Physicians and others of humanitarian views have done much work in this direction, but have found it difficult to interest the authorities upon whom action must depend.

To quote some of the important points from Dr. Becker's paper: "Under the present law the county court may order the temporary detention of any alleged insane person, and the law provides further, that such patients shall not be confined in jails or lock-ups, and authorizes county authorities to provide suitable quarters for the purpose. It was found in 1897 that out of twenty cases recently placed in custody four were in a short time found 'not insane' and released." Further facts given are as follows: "In the reports of the insane hospitals, seven cases at Mendota, two at Oshkosh, and seven at the Milwaukee county hospital were found 'not insane.' These cases, if properly cared for in a detention hospital, need not have been committed to an asylum and handled by the law as insane. At the detention pavilion in New York it is found that 26 to 33 per cent. do not require commitment. In 1891, of 2,004 admissions only 1,474 were found insane. At the Chicago detention hospital in 1895 there were 1,187 admissions, of which 307 did not require commitment. In Milwaukee there is almost constantly some case of alleged insanity in the police station or jail—a crying injustice to persons whose only crime is being sick in mind instead of in body, or if they are not mentally unbalanced, as often proves to be the case, the injustice is double, and the facts above given prove that about one-third of the supposed or alleged insane prove not to be so; so that a detention hospital would be a very great beneficence to a large number of persons not insane and would save them from commitment to the insane hospital."

Not only humanity, but economy would be promoted if a detention hospital were provided. The saving would be in the useless transportation of a large number of unsuitable cases to the asylum, and their maintenance for a much longer period than would otherwise be necessary, and on the other hand, the expense to the county of providing such a place of detention would be small. It could be done in connection with some existing hospital. It has been suggested that the

Emergency Hospital of Milwaukee has a whole floor of which little or no use is made, which could be suitably fitted up at an expense of a few hundred dollars.

It is to be hoped that the attention of the profession will be enlisted in an effort to meet the above indicated requirements, and that they in their turn will interest public-spirited men and women, and that their joint efforts may win the co-operation of the public authorities so that the injustice and disgrace of confining helpless and innocent sick persons with criminals may come to an end.

THE WISCONSIN MEDICAL UNION.

The Wisconsin Medical Union is a new society, the organization of which was heralded some weeks ago. From a circular in our possession we learn that this society is made up of physicians of the Regular, Homeopathic, Eclectic, and Physiomedical Schools of practice, its object being to unite the "liberal minded physicians of the various schools of practice in this State for their mutual protection against unjust medical statutes," etc. We are told, furthermore, that this society holds the same relation to the American Medical Union as other state societies hold to the American Medical Association, and that it counts among its members many names of the "faculties of leading medical colleges of the four schools and many of the most distinguished physicians of the States."

We congratulate this Union upon its high aims and the great professional attainments of its members. Of the latter but six are known to us by name (they being the officers), and of five of these six we have the following record:

One poses as an electro-therapeutist, but formerly practiced vitapathy.

A second is the graduate of a diploma mill whose organizers have since served time in Joliet. He furnished an affidavit of having practiced medicine before the medical law went into effect, and upon this a license was issued.

A third and fourth are graduates of the famous Milwaukee Eclectic College, which, as was determined in court, in reality existed only for the sale of diplomas.

A fifth is practicing under a certificate of registration issued by the State Board of Medical Examiners. He bought a diploma issued by the Illinois Health University, perjured himself in obtaining a certificate of registration by claiming that during the year 1898 he was practicing in Wisconsin, when, as a matter of fact, he was serving

time at Waupun for adultery. We are told that this information has long been in possession of the State Board of Medical Examiners, but they have thus far neglected to take any action in the matter.

With such a splendid mental and moral equipment the Wisconsin Medical Union invites doctors (some only) to join in the good work of preventing the enactment of laws that would deprive them of their "rights" to practice medicine in this State.

THE CONTAGIOUSNESS OF SCARLET FEVER.

Interesting observations with reference to the contagiousness of scarlet fever, at variance with popularly accepted beliefs and the beliefs we ourselves have inherited, are reported from Christiania. We are indebted to the *American Journal of Medical Sciences* for a report in abstract of observations by Aaser overthrowing the impression so deeply rooted in our minds that the desquamating epidermis is the chief factor in scarlet fever contagion, and that a child in the stage of exfoliation carries the important element of danger to others. Aaser has had unusual facilities to study these facts, having in the past seven years had under his care 3,800 cases of scarlet fever, of which number 79 had derived their contagion from patients who had previously been discharged as recovered. All patients sent out as recovered had been thoroughly cleansed, and had ceased desquamating. For these reasons, and also because of the fact that many children who are exposed to desquamating scarlet fever patients do not contract the disease, Aaser believes that there is another more potent source of infection, namely, that of discharges from the nose, throat or ear, and he makes extensive observations on this point. He believes that safety to others lies not in recording a case as recovered as soon as desquamation has ceased, but in considering the patient still capable of transmitting the disease so long as there is any secretion from the nose or throat.

This subject is a matter worth recording, and we must feel it among the possibilities that further observations will confirm Aaser's contention. The practical importance of this theory needs no emphasis.

NEWS ITEMS.

Pneumonia classed as contagious disease.— Pneumonia has become so prevalent in New York that the health department has decided to amend the sanitary code by classifying it with measles, scarlet fever, and smallpox, and making it compulsory on physicians to report cases promptly. This is said to be without precedent in America or Europe. In the last five weeks, according to the health department, there had been 820 cases reported, an increase of 43 per cent. over last year.

The Children's Free Hospital, Milwaukee, has moved into the new building on Tenth street, near Wells. The capacity of the hospital has been more than doubled, a sun parlor has been added, and a thoroughly modern operating room fitted up; quarters for the isolation of contagious cases occurring in the hospital have been provided, and altogether the institution is a credit to the managers, and a monument to the generous donor of the site, Mr. H. H. Camp.

Dr. Nels N. Glim, of Ashland died on Jan. 15th of general peritonitis, following an attack of acute perforative appendicitis. Dr. Glim was a graduate of Hamlin University, class of '98. At the time of his death he was secretary of the Ashland County Medical Society, U. S. Pension Examiner, and Grand Medical Examiner for the I. S. W. A. He was a man highly respected in medical, as well as lay circles, and was one of the men the profession could ill afford to lose.

The Wisconsin State Board of Medical Examiners met in Milwaukee Jan. 12, 1904. It is understood that many complaints of non-enforcement of the State Medical Laws are coming to the Board. The Milwaukee County Medical Society has taken the matter up, a committee has been appointed for the purpose of bringing the matter to the attention of the proper authorities, and we may look forward to "something doing" in the near future.

Charged with illegal practice of medicine.— The Health Commissioner of Milwaukee and the Secretary of the State Board of Medical Examiners have lodged a complaint against M. J. Kalowsky, charging him with practicing medicine without a license. The consideration of the case has been postponed for the reason that the District Attorney's office is crowded with work.

The location of the proposed new Isolation Hospital for Milwaukee is engaging the attention of the profession: they are practically unanimous against an inaccessible county location which seems to be favored by the Board of Aldermen. The County Society will appoint a committee to confer with the health authorities in the matter.

The Academy of Natural Sciences, Philadelphia, has inaugurated the plan of giving free lectures to the people on hygiene and sanitation. Dr. Seneca C. Egbert is delivering the present series.

Dr. Oakey, of Madison, was among the unfortunate victims of the Iroquois Theater fire in Chicago. He was buried in Madison on Jan. 3, 1904.

Dr. A. R. Reynolds, Health Commissioner, of Chicago, has been reappointed by the mayor.

CORRESPONDENCE.

STOMACH SURGERY IN VIENNA.

(Special Correspondence.)

At one of the surgical clinics of the Allgemeines Krankenhaus, a series of puzzling stomach cases presented itself during the last two weeks, which well illustrates the difficulties associated with both the diagnosis and treatment of these diseases. Ulcers of the stomach, which prove refractory to medical treatment, are in Vienna referred to the surgeon. Rectal feeding has been entirely abandoned by many physicians, because they have found that it could not be continued for a sufficient period of time to permit healing of the ulcer. Sometimes the ulcer is excised; in case of stenosis of the pylorus resulting from cicatrization of the ulcer, gastroenterostomy is performed; usually jejunostomy is used as a substitute for rectal feeding. Should the last be chosen the upper portion of the jejunum is grasped, a catheter is introduced into it by means of a technic similar to that employed by Witzel for gastrostomy, and the intestine is sewed to the abdominal wall below the umbilicus. The patient is fed through the catheter for from six months to one year, the stomach remaining absolutely at rest. It is believed at one of the surgical clinics, that the unsatisfactory results of treatment of cases of carcinoma of the stomach are due to the fact that these cases are not subjected to surgical treatment until a tumor is palpable or other positive evidences appear; that at such times, the tumors have obtained such proportions that medical treatment is out of the question. Though there is surely much ground for this belief, its dangers are also great, as is demonstrated by the following two cases operated upon two successive days:

Case 1. A middle-aged woman complained for several months of indefinite stomach symptoms; no vomiting or other evidences of pyloric stenosis present. Gradual emaciation. No tumor palpable in abdomen. Examination of a test breakfast (Ewald) showed an absence of free hydrochloric acid, no lactic acid. Laparotomy revealed a few enlarged mesenteric glands. The stomach appeared normal from without. The surgeon, convinced that some gross pathological change must be present, opened the stomach and thoroughly examined the mucous coat with the finger. Absolutely nothing was found. The patient had been subjected to the dangers of a gastrotomy on account of a chronic gastritis.

Case 2. A middle-aged woman, presenting many of the same symptoms as the previous case. Free hydrochloric acid was absent, lactic acid was present in a test meal. Some believed that they could feel a tumor in the region of the pylorus, others could not. On laparotomy, the stomach was found to present an absolutely normal appearance, but whenever it was palpated, there was a spasm of the musculature. This occurred most markedly in the neighborhood of the pylorus, so that at times there was actually the semblance of a tumor. The operator, bearing in mind his previous experience, refrained from gastrotomy in this case.

While, on the one hand, gastrotomy appears a rather radical procedure when the external wall of the stomach looks normal, the dangers of an incomplete examination are illustrated by another case operated upon in the same clinic. A man about 35 years of age had a gastro-enterostomy for a stricture of the pylorus, supposedly resulting from peptic ulcer. Some months later, symptoms of stenosis reappeared. It was assumed that the laparotomy had presented an opportunity to verify the diagnosis. Now a large hard tumor was felt in the epigastrium. This was believed to be the indurated base of the ulcer and adhesions about it. A second laparotomy was planned with the intention of performing jejunostomy, thus setting the stomach at rest until the ulcer was completely healed. When the abdomen was opened, a carcinoma was found, which involved both the pylorus and the artificial opening into the gut. In this case, the tumor must have been quite small at the time of the first operation. Had it been discovered, radical treatment might have been of avail.

The following case offered great difficulties in diagnosis on account of altered anatomical conditions. A patient, who had been treated medically for gastric ulcer with no relief, was operated upon (gastroenterostomy) in a neighboring town. The symptoms abated for a time, but three months after the operation were as severe as before. Medical treatment again proving ineffective, a second laparotomy was done and again—gastroenterostomy. This was about six month ago. The patient now presents himself at the Allgemeines Krankenhaus, complaining more than ever of pain on eating. There are no evidences of stenosis—how can there be, with one natural and two artificial pyloruses? Nothing but intense pain on taking any kind of food. The question arose—was this due to adhesions; or to stagnation in some of the loops of gut, which might or might not be functionating, or was the original ulcer still unhealed? The question was settled in a rather unexpected manner. A test breakfast was given; the stomach tube had been inserted, when a large amount of blood gushed forth. Evidently the old ulcer had not yet healed. The course of treatment became apparent—jejunostomy.

A woman, about 35 years of age had been suffering for three years from gastric pain on eating. She had emaciated considerably; never vomited. On examination, a tumor the size of a fist was found in the epigastrium. It was moderately tender, hard and freely movable in all directions. The diagnosis lay between carcinoma and ulcer. To arrive at a definite conclusion, a test breakfast was given. An hour later the stomach was found to be absolutely empty. As a result of the insertion of the tube, the patient had a chill and a rise in temperature. Several further attempts to examine the stomach contents resulted in the same way. An analysis of the gastric juice was not possible. The diagnosis inclined toward ulcer on account of (1) the length of illness; (2) the good motility of the stomach; (3) the nature of the tumor—in spite of its long duration, there were no adhesions about the stomach and no apparent metastases, and (4) the results of medical treatment—slight increase in weight of the patient. It was noted, however, that the tumor did not decrease in size as might be expected in case of ulcer. Laparotomy revealed an enormous carci-

noma, involving almost the entire posterior and part of the anterior wall of the stomach—so much, in fact, that not even a palliative operation was considered possible.

The palliative operations employed for gastric carcinoma are gastroenterostomy anterior or posterior, retrocolic or antecolic, the choice depending on the conditions present. They are performed in all cases as soon as the slightest evidence of stenosis appears. Von Eiselsberg has devised a new operation and has practiced it in a few cases with good results—"Pylorus Ausschaltung" (exclusion of the pylorus). It is applicable only to cases of carcinoma or ulcer, which are confined to the region of the pylorus, and requires a large amount of uninvolved stomach wall. The stomach is completely divided (as near the pylorus as possible): both parts are sewed shut and a gastroenterostomy is done between the cardiac portion and the upper jejunum or duodenum, as desired. The object of this procedure is, in case of ulcer, to keep the food away from the affected area, thus promoting rapid healing; and in the case of carcinoma, to prevent the tumor—as occurs so frequently after gastroenterostomy—from encroaching upon the newly made artificial pylorus. (L. M. L.)

BALTIMORE LETTER.

On October 12th, 1903, the meetings of the Johns Hopkins Hospital Medical Society were resumed. The election of officers was first in order. By a unanimous vote of the Society, Dr. T. B. Futcher was elected to fill the presidential chair for the ensuing year, while Dr. C. P. Emerson was chosen to fill the office of secretary.

The program was opened by Dr. McCrae, who had a pathological specimen to exhibit. The case was one of *aortic aneurysm* which had interested the members of the staff for several years. The patient, a negro 49 years of age, was first admitted to the hospital in December, 1901. His complaint was shortness of breath, cough, and pain in the chest. On examination a heaving of the manubrium was felt and under it was a distinct area of dulness. There were symptoms also of pressure on the recurrent laryngeal nerve. After remaining in the hospital a few weeks he went out much improved. He was again admitted in October, 1902, complaining of the same symptoms. A pulsating swelling was seen from the second to the fourth rib on the right of the sternum which extended from the sternal margin to the nipple line. This swelling was very prominent, and on palpation a systolic impulse and a diastolic shock could be felt. There was no prominence or pulsation to the left of the sternum. On October 17, 1902, the swelling became less prominent. On the 19th there was an attack of very severe dyspnea, and at noon on the same day the swelling had disappeared entirely to the right of the sternum and had moved to the left. The blood pressure became distinctly less in the left radial. Ten days later the swelling moved back again to the right. He was discharged in December with no change of condition.

The patient was again admitted in March, 1903, and was shown before the Society at this time. There was dyspnea, precordial bulging, and systolic

retraction. The greatest fullness was to the left of the sternum, but within a month it moved to the right and remained there until his death in September, 1903. The dulness, however, on the left side remained. At autopsy no explanation could be found for the wandering character of the aneurysm. It started from the arch one inch above the valves and involved the whole arch. The portion which lay to the right of the sternum was very thin. Below and to right and left posteriorly were thick clots. There were marked adhesions between the pericardium and pleura. Dr. McCrae suggested that perhaps the moving was due to a change in size of the aneurysm. The heart changed position with the aneurysm. Another suggestion was that the tumor might have pressed on a bronchus and so collapsed the lung, and when this filled again the aneurysm moved. Death was due to rupture into the pericardium. There was erosion of the trachea, the left lung was contracted, there was a general diffuse bronchiectasis throughout the lung, the dilated bronchi being filled with purulent material. There was a second small aneurysm on the descending aorta.

Dr. McCrae's report was followed by a report of two surgical cases by Dr. Follis. The first case, a woman of forty-five, was admitted one day last December. Two hours previously she had been shot in the right lumbar region with a 38 calibre revolver. She was suffering with acute abdominal pain. Examination showed general abdominal tenderness most marked to the right of the umbilicus. The pulse was 28 to the quarter; leucocytes 35000. Operation was immediately done, 2 hours and 40 minutes after the injury. As soon as the abdomen was opened bloody fluid and bowel contents were encountered. Eleven perforations of the intestines were found. Two of these in the cecum were closed, as were also two in the ileum. The rest of the perforations, seven in number, were all within a distance of 30 cm., so resection was thought advisable. The patient's condition was very bad on the table, so an anastomosis was not done, but the two ends were brought up into the abdominal incision. The patient did well after operation. A marked dermatitis developed about the ends of bowel. After two weeks it was seen that the patient was losing ground on account of excessive loss of nourishment, so a second operation was done. This was only a simple affair—the placing of an elastic ligature. After six weeks the ends of the bowel were excised and turned in. Complete recovery has resulted.

The second case shown by Dr. Follis was that of a colored boy admitted in December, 1902, with typical signs of *general peritonitis following typhoid perforation*. The abdomen was opened and a perforation found 25 cm. above the ileocecal valve. This was brought to the wound and drained. Pus was found throughout the peritoneal cavity. Later on the child developed pneumonia in the right lung, a large abscess in the thigh, acute intestinal obstruction, and last of all measles. In spite of these many vicissitudes he recovered completely and was able to come to the meeting to show himself.

The last number on the program was a paper by Dr. Sampson on *ascending renal infection*. After much animal experimentation and observation of cases he concludes that this may take place by way of the blood channels, the lymphatics, or the lumen of the ureter. In ascending the ureter infection may take place by reflux, motility of organisms or direct extension. Reflux does not occur in the normal ureter. Some injury to the ureteral orifice is necessary before this can occur. (R. G. W.)

CLINICAL REPORTS.

AN ASEPTIC POULTICE.

By P. L. Scanlan, M.D., Lancaster, Wis.

In twelve years of practice I have treated many, perhaps 1,000 cases of infections, boils, felons, whitlows, carbuncles, and other forms of cellulitis, with great benefit to the patient. My aim has been to abort and hasten resolution instead of the old method of waiting for nature to do all the work. I have been aggressive and energetic in such cases, hoping to cut short the period and alleviate the intensity of the pain and lessen the loss of time of these patients. Many are the testimonials of gratitude received for my method of dealing with local inflammatory conditions.

Of all forms of treatment, the poultice as a local measure is the most time honored. The old fresh cow manure poultice of our grandfathers was scarcely less efficient than the flaxseed poultice of our fathers, and the flaxseed scarcely less barbarous than it predecessor and less useful as far as furnishing heat and moisture is concerned. The use at the present day by an intelligent physician of any poultice, either on the unbroken or broken skin, without regard to its aseptic qualities, is inexcusable.

Chas. T. Parkes, Professor of Surgery at Rush, told us to use alcohol and boric acid as a fomentation in cases where antiphlogistic measures were needed. Out of Parkes' idea I have developed what I consider a useful aseptic poultice, having the proper antiphlogistic qualities, although not the transitory artificial heat of flaxseed. Here is my formula which I modify to suit the case:

℞. alcohol, 4 ounces; glycerine, pure, 4 ounces; boric acid, 3 drachms.

Saturate absorbent cotton with this mixture, place the cotton over the surface of the swelling, and over this place oiled silk or gutta percha tissue. Keep the absorbent cotton moist by applying a little of the mixture every hour. If inflammation is less acute dilute the mixture with an equal quantity of water. The water ought to be sterile. The advantage to be gained is an aseptic poultice in which constant heat is produced by the alcohol. The action of the hygroscopic glycerine, the active ingredient of all forms of "antiphlogistine" on the market, is one of bleeding the local tissues by osmosis while the alcohol helps its penetration into them. The basic principle of "antiphlogistine" is carried out together with the old poultice idea. The results are such as you can not get by any other means, and the cleanliness of the method is in its favor. No objection can be made to adding cologne water or some perfume to the mixture. The glycerine should be pure to avoid foreign irritating substances, and the purer it is the more hygroscopic. The mixture is non-poisonous, and no harm can be done by its use, unless too large a proportion of alcohol is used, in which case it may blister. The glycerine can be omitted and its place taken by water with remarkably good results, or less glycerine can be used in the mixture.

THE STATE MEDICAL SOCIETY OF WISCONSIN.

ORGANIZED 1841.

Officers for 1903-1904.

F. E. WALBRIDGE, Milwaukee, President.

JAMES MILLS, Janesville, 1st Vice-Pres. C. C. GRATIOT, Shullsburg, 2nd Vice-Pres.

CHAS. S. SHELDON, Madison, Secretary. S. S. HALL, Ripon, Treasurer.

Provisional Councilors.

1st Dist., J. G. Meachem, - - - - Racine	7th Dist., W. T. Sarles, - - - - Sparta
2nd Dist., J. S. Walbridge, - - - - Berlin	8th Dist., J. F. Pritchard. - - Manitowoc
3rd Dist., C. S. Smith, - - - - - Elroy	9th Dist., T. J. Redelings, - - Marinette
4th and 5th Dist., G. A. Kletzsch, - Milwaukee	10th Dist., J. M. Dodd, - - - - Ashland
th Dist., Geo. V. Mears, - - - Fond du Lac	11th Dist., E. L. Boothby, - - - Hammond

Next Annual Session, Milwaukee, June, 1904.

The Wisconsin Medical Journal, Official Organ.

SOCIETY PROCEEDINGS.

ORGANIZATION NOTES.

The record of progress during the past month is as follows: The formal report of Green County gives 25 members instead of 15, as stated in the December number of the JOURNAL. Monroe County has reported with 18 members, while Rock, Eau Claire and Vernon have reorganized, but have not yet reported their membership. In the list of 17 counties still unorganized, reported last month, Marquette should have been omitted as it had already been reported as organized. This leaves 16 counties, out of the 72, without county societies.

Doubtless many new members have joined the county societies at the December meeting. Their names, together with their state society dues, should be sent at once to the secretary of the state society, in order to secure the WISCONSIN MEDICAL JOURNAL from the first of the year.

The attention of the county secretaries is called to the provision in the County Constitution by which it is provided that "The annual dues shall be payable on January 1st of each year," although the state society dues are not sent to the state secretary until April 1st to 10th. If the dues for 1904 are not yet collected, the matter should be attended to at once, or at the very next meeting of the society if held before April.

Sec. 2 of Chapter 4 of the By-Laws of the State Society provides that "Each component County Society shall be entitled to send to the House of Delegates each year one delegate for each 50 members, and one for each major fraction thereof, but each component society which

has made its annual report, and paid its assessment, as provided in the Constitution and By-Laws, shall be entitled to one delegate." Many of the county societies elected their delegates at the December meeting, or previously, but those which have not already done so should keep the matter in mind and elect a delegate at the next meeting of the society. All are eligible to the office, including the officers of the society.

A note from Dr. McCormack, Chairman of the Committee on Organization, explains the clause in the County Constitution by which "Agreements and schedules of fees shall not be made by this Society." The purpose of the Committee was not to oppose fee tables, but it seemed to them wisest that those individuals who compose the society should take such action, if desired, outside the society, and thus put the responsibility upon the profession rather than upon the society.

It may be well to speak of the relation of the WISCONSIN MEDICAL JOURNAL to the profession and the component county societies. It is the official organ of the state society, which under our present plan means the membership of all the county societies. It is therefore, the official organ of the county societies as well. It is not only a medical journal, in a broader sense, and publishes the proceedings of the annual meetings of the state society, but it is the only medium of communication and information for the county societies. The county secretaries are, therefore, urged to report promptly and fully to the editor everything concerning the life and growth of their organizations. This means a full report of the meetings, including a synopsis of papers of special interest, the enrollment of new members, and everything else of interest connected with the profession. We are thus kept in touch with each other, gain a knowledge of what is done in the profession all over the State, and if we avail ourselves of the privilege, have a most effective means of forwarding and perfecting the organization of the profession now in progress. There may be features connected with the plan about which the county secretaries or members are in doubt. There are questions to ask, measures to discuss, and doubtful points to clear up. The columns of the JOURNAL are freely open to all for such purposes and you are urged to make use of them as your own possession.

We are now at the beginning of a New Year. If we are to succeed we must all pull together, and *keep on pulling*. The success of the movement depends absolutely upon the efficiency and thoroughness of the work in the county societies. A great responsibility rests with the county secretaries. The society should represent every man in the county who is eligible, so do not rest satisfied till the last one has been secured. Collect the dues promptly. Secure personal records from all and let your card-index be at all times a complete record of the whole profession of the county. Make your meetings so attractive and profitable that outsiders will feel that they can't afford to miss them. This means "eternal vigilance" and plenty of hard work, but it is work which pays well in every way. The final result of such earnest effort will not fail to show far-reaching benefits—both individually and to the whole profession of the State. C. S. S.

ASHLAND COUNTY MEDICAL SOCIETY.

The annual meeting was held at Ashland on the 8th of December, and the following officers were elected for the ensuing year: President, Dr. W. T. Rinehart; vice-president, Dr. M. S. Hosmer; secretary and treasurer, Dr. N. N. Glim; delegate, Dr. M. S. Hosmer; censor, Dr. W. T. O'Brien, all of Ashland.

The meeting closed with a banquet given by the retiring president, Dr. Hugh McKennon. There were no papers or discussions at this meeting.

J. M. DODD, M. D., Secretary.

BARRON-GATES-POLK COUNTY MEDICAL SOCIETY.

The last meeting of this society was held at Cumberland, Dec. 9; fifteen members were present. The following papers were read and discussed: "Our Society," Dr. O. M. Sattre, Rice Lake; "Ophthalmia Neonatorum," Dr. Webster, Rice Lake; "Acute Intestinal Obstruction," Dr. A. E. Hedback, Barron; "Care of Obstetrical Cases," Dr. Gentz Perry, Amery; "Artificial Infant Feeding," Dr. A. L. Wells, Clear Lake; a talk on "Consumption," Dr. W. B. Hopkins, Cumberland.

Dr. Babcock showed a case of advanced epithelioma, which he is treating with the X-ray.

Five new members were elected. At 6 o'clock a supper was given at the Hotel Cumberland and a sociable time was enjoyed for a couple of hours.

It was decided to hold the next meeting at Amery on March 8, and an invitation has been extended to the Washburn-Sawyer-Burnette County Medical Society to be present as guests.

I. G. BABCOCK, M. D., Secretary.

DOUGLAS COUNTY MEDICAL SOCIETY.

The first annual banquet and election of officers of the re-organized Douglas County Medical Society was held at Superior, December 2. The following officers were elected for the ensuing year: President, Dr. George Saunders; vice-president, Dr. George H. Conklin; secretary, Dr. W. W. Pretts; treasurer, Dr. Frank E. Detting; delegate, Dr. C. D. Conkey; censors, Drs. John Baird, L. W. Beebe and H. J. Orchard.

After the banquet the following toasts were responded to: "Historical Aspect of Medicine," Dr L. B. Shehan; "Medicine as a Profession," Dr. W. E. Ground; "Signs of the Times," Dr. J. A. Rene; "The Hospital Interne and Staff," Dr. Frank E. Detting; "The Middle-Aged Doctor," Dr. C. D. Conkey; "Our Ideals," Dr. L. A. Potter. Dr. H. Jefferson O'Brien acted as toastmaster.

The establishment of a museum, pathological and biological laboratory, and a medical journal were advocated by various members present, but no definite action was taken.

The regular monthly meeting was held January 6, 1904, at the Superior Hotel, Superior. Twelve members were present and one visiting physician.

Dr. H. J. Orchard read a very interesting and timely paper on the

"Care of Contagious Diseases." The paper was well received and thoroughly discussed by the members present.

A communication was read by Dr. W. W. Pretts in regard to establishing a Pathological Laboratory in conjunction with the city of Superior. A committee of five was appointed with power to take full action on the part of the society. W. W. PRETTS, M. D., Secretary.

DUNN COUNTY MEDICAL SOCIETY.

The annual meeting of the Dunn County Medical Society was held at Menomonie City, Dec. 15, 1903, the president, Dr. E. H. Grannis, in the chair. Twelve members were present. "A Historical Review of the Medical Profession of Dunn County" was the title of a paper read by Dr. Decker and discussed by Drs. Howison, Grannis and Denham.

Dr. Denham reported the case of a young lady who had been asleep seven days after taking a small quantity of chloroform to have a toe nail removed. Discussed by Drs. Larson, Doughty, Decker and Dennis.

Dr. Heising gave a comparative description of the hospitals of Vienna, Paris and London, as judged from personal observation. Dr. W. A. Dennis, of St. Paul, Minn., read a paper entitled "The Operative Treatment of Cancer of the Breast"; discussed by Drs. Grannis, Heising and Finsted.

The applications of Drs. W. H. Parks, H. C. Caldwell, P. H. Doughty and F. E. Butler were reported on favorably by the Board of Censors; they were duly elected to membership.

At 6 p. m. adjournment was taken to the dining room of the Royal Hotel, where thirteen hungry and unsuperstitious M. D.'s did justice to a bounteous meal.

On resuming business it was suggested by some of the country members that the medical profession were not getting as much as they should for their services, and on motion a committee consisting of Drs. Denham, Larson and Finsted was appointed to prepare a fee bill.

Moved and carried that a committee be appointed to formulate a scheme for the collection of bad accounts. Committee appointed consisted of Drs. Grannis, Howison and Finsted.

Officers elected for the ensuing year: President, Dr. E. H. Grannis; vice-president, Dr. D. H. Decker; secretary and treasurer, Dr. G. A. Barker; delegates, Drs. E. H. Grannis and L. A. Larson.

G. A. BARKER, M. D., Secretary.

GRANT COUNTY MEDICAL SOCIETY.

The annual meeting of the Grant County Medical Society was held at Fennimore, December 10, 1903, when the following officers were elected: President, Dr. James Oettiker, Platteville; vice-president, Dr. L. G. Armstrong, Boscobel; secretary and treasurer, Dr. P. L. Scanlan, Lancaster. Four new members were admitted.

The topic for discussion, "The Treatment of Pneumonia," was opened by Dr. C. A. Armstrong and was participated in by all present.

The next meeting of the society will be held at Platteville, May 12, 1904.

P. L. SCANLAN, M. D., Secretary.

GREEN LAKE COUNTY MEDICAL SOCIETY.

At the annual meeting held at Princeton, Dec. 10, the following officers were elected for the ensuing year: President, Dr. C. E. Thayer, Markesan; vice-president, Dr. A. L. Travis, Princeton; secretary and treasurer, Dr. B. E. Scott, Berlin. Three new members were elected. Dr. George Baldwin, of Dartford, read a paper on "Infantile Convulsions," in which he emphasized the frequency of digestive disturbances as an etiologic factor and the necessity for thorough evacuation of stomach and bowels and subsequent careful dieting as the logical treatment, after stopping the attack by the hot pack, cold to the head, and chloral per rectum. The paper was thoroughly discussed by Drs. Walbridge, Willis, Jackson, Morgenroth and others.

In the absence of Dr. Crumbs his paper on "Abortion" was read by the secretary and elicited a lively discussion of the best means for removing a retained placenta or membranes.

Dr. Travis, of Princeon, read a paper on "The Injection Treatment of Reducible Inguinal Hernia." in which he deplored the attitude of the profession in general toward this method of treatment, which, he maintained, when properly performed on selected cases, gave as good results as any other method, was free from danger, more easily applied by the general practitioner, and more acceptable to the majority of patients. He described his method and reported a cure in 75 per cent. of selected cases.

The next meeting will be held April 28.

B. E. SCOTT, M. D., Secretary.

IRON COUNTY MEDICAL SOCIETY.

The first regular meeting of the Iron County Medical Society was held at the Burton House, on December 8.

Dr. Lando was admitted to membership. No formal papers were read, but the members had a very pleasant talk on local medical affairs. After the meeting the society enjoyed a duck dinner at the invitation of Dr. Urquhart, the president of the society.

The announcement made in the December JOURNAL that Dr. Uren had been elected vice-president was an error; Dr. Gallardet was elected vice-president at the time of organization, while Dr. Uren was elected delegate and censor as reported.

T. J. HAMBLEY, M. D., Secretary.

JEFFERSON COUNTY MEDICAL SOCIETY.

The last meeting was held at the County Court House, Jefferson, Dec. 1, the organization of the society was completed and the following officers were elected for the year 1904: President, Dr. W. W. Reed, Jefferson; vice-president, Dr. W. F. Whyte, Watertown; secretary and treasurer, Dr. C. E. Lauder, Johnson Creek; board of censors, Drs. Carl R. Feld, William A. Engsberg and U. P. Stair.

The next meeting will be held at Jefferson, April 19, 1904.

C. E. LAUDER, M. D., Secretary.

JUNEAU COUNTY MEDICAL SOCIETY.

The first meeting of this society was held at Mauston, Dec. 1, the president, Dr. J. B. Edwards, in the chair; ten members were present. As this was the annual meeting no scientific program was presented. The present officers were re-elected for the ensuing year. Dr. J. R. Bryant, of Lyndon Station, was admitted to membership.

The next meeting will be held the second Tuesday in July.

A. T. GREGORY, M. D., Secretary.

LANGLADE COUNTY MEDICAL SOCIETY.

The annual meeting was held at Antigo, Dec. 3, when the following officers were elected: President, Dr. I. D. Steffen; vice-president, Dr. M. J. Donohue; secretary and treasurer, Dr. Frank I. Drake; censors, Drs. F. V. Watson, M. A. Flatley and M. J. Donohue, all of Antigo. Drs. G. W. Devalaar, of Eldie, and J. H. Baker, of Bryant, were elected to membership.

FRANK I. DRAKE, M. D., Secretary.

LINCOLN COUNTY MEDICAL SOCIETY.

At the regular monthly meeting of this society, held Dec. 2, Dr. M. Ravn read a paper entitled "The Differential Diagnosis and Treatment of Typhoid Fever," which was well received and freely discussed.

The next meeting will be held Jan. 6, at which time Dr. F. W. Schultz will read a paper on "The Microscopic Findings in the Blood and Urine of Typhoid Fever Patients."

The present officers are as follows: President, Dr. W. H. Monroe; secretary, Dr. Charles C. Walsh; treasurer, Dr. A. R. Wittman.

CHARLES C. WALSH, M. D., Secretary.

MEDICAL SOCIETY OF MILWAUKEE COUNTY.

The annual meeting was held in the trustees' room, Public Museum building, Dec. 11, 1904. Thirty-nine members were present. Officers were elected for the ensuing year as follows: President, G. E. Seaman; vice-president, R. G. Teschan; treasurer, Joseph Kahn; secretary, A. W. Gray; censor, H. V. Ogden.

On motion of Dr. A. J. Burgess a committee was appointed to prepare a social program for the January meeting.

A. W. GRAY, Secretary.

SHAWANO COUNTY MEDICAL SOCIETY.

The last regular meeting was held at Shawano, December 8, 1903. The following officers were elected: President, Dr. W. H. Cantwell; vice-president, Dr. H. R. McComb; secretary and treasurer, Dr. H. W. Partlow, all of Shawano; delegate, Dr. Rothman, Wittenberg.

Dr. H. W. Partlow, of Shawano, read a paper on "Injuries to the Skull and Brain." The next regular meeting will be held at Shawano, on the second Tuesday in March.

H. W. PARTLOW, M. D., Secretary.

SHEBOYGAN COUNTY MEDICAL SOCIETY.

The Sheboygan County Medical Society held its annual meeting at the Grand Hotel, Sheboygan, on December 30, 1903; the following officers were elected for the ensuing year: President, Dr. O. J. Gutsch; secretary and treasurer, Dr. H. C. Reich; delegates to the State Medical Society, Drs. Wm. H. Gunther and Otto B. Bock; censors, Drs. Arthur E. Genter, C. W. Pfeifer and Wm. L. Goette.

H. C. REICH, M. D., Secretary.

WASHINGTON COUNTY MEDICAL SOCIETY.

The annual meeting of the Washington County Medical Society was held at West Bend, December 30. The following program was presented: "The Application of Hygiene in the Prevention of Infectious Diseases," Dr. Lynch; "The Advertising Doctors and Nostrum Vendors," Dr. Blank; and the address by the president, Dr. E. M. Rogers, on the "Physician."

The election of officers for the ensuing year resulted as follows: President, Dr. H. Blank, Jackson; vice-president, Dr. D. W. Lynch, West Bend; secretary and treasurer, Dr. G. A. Heidner, West Bend; censors, Drs. E. H. Ehlert, Hartford; W. J. Wehle, West Bend, and N. E. Hausmann, Kewaskum; delegate, Dr. J. E. Reichert, Schlesingerville; committee on public health and legislation, Drs. Heidner, Ehlert and Geo. H. Rheingans. The secretary was instructed to make application to the State Society for a charter. The secretary was also instructed to have the papers which were presented before the society published in the various county papers so that the public might derive benefit from these contributions.

The next meeting will be held at Hartford, March 30.

G. A. HEIDNER, M. D., Secretary.

WINNEBAGO COUNTY MEDICAL SOCIETY.

The December meeting of this society was a joint meeting with the Medical Club and was held at Oshkosh, December 7. Dr. Gibbons, of Neenah, presented a paper on "Constipation." Drs. Combs, Howard and Corbett also presented papers.

The election of officers resulted as follows: President, Dr. G. M. Steele, Oshkosh; vice-president, Dr. S. G. Todd, Neenah; secretary and treasurer, Dr. S. B. Ackley, Oshkosh; censors, Drs. M. E. Corbett and C. J. Combs, both of Oshkosh.

S. B. ACKLEY, M. D., Secretary.

MILWAUKEE MEDICAL SOCIETY.

Regular meeting, Dec. 8, 1903. The president, Dr. Burgess, in the chair.

Dr. J. W. Coon presented a careful paper on "Early Diagnosis of Pulmonary Tuberculosis." In the discussion following, Dr. Sayle thought that a diagnosis was often possible by means of an X-ray examination 8 to 10 weeks before any physical signs were discoverable. Dr. Washburn thought the value of an X-ray examination was limited to its disclosing the variations in the movements of the diaphragm; he is accustomed to attach more import-

ance to a careful study of the rectal temperature, and to the early development of increased vocal fremitus over the area involved. Dr. Seaman referred to the early enlargement of the bronchial lymphatic glands, which is frequently demonstrable in children. Dr. Hay called attention to the early alterations in the character of the vesicular murmur.

Dr. F. Shimonek reported three cases of fracture of the patella and one case of rupture of the tendon of the quadriceps extensor femoris which had been treated as a fracture of the patella before coming into his hands. Drs. Brown and Levings participated in the discussion.

Meeting of December 22, 1903.

Dr. H. B. Hitz presented a patient on whom he had performed an operation for double frontal sinusitis.

Dr. Thos. Fitzgibbon read a paper on "Vesicular Mole," reporting an interesting case. Discussion by Drs. Stoddard, Washburn and Nichols.

Dr. H. B. Hitz read a paper on "Double Frontal Sinusitis Operation," a description of the case he had previously shown. Discussion by Drs. Seaman and Schiller. WILLIAM THORNDIKE, M. D., Secretary.

SOCIETY OF GERMAN PHYSICIANS AT MILWAUKEE.

At the meeting held Dec. 5, 1903, Dr. J. Sholdski reported a case of *reflex vomiting*, recurring every morning after breakfast, in a man with hypertrophic rhinitis. The vomiting stopped from the first day after cauterization of the nose.

Dr. A. J. Puls performed a *perineoplasty* in a woman suffering from hemorrhoids of the size of a hazelnut to a walnut, laceration of the sphincter and a scar of the perineum, leading towards the intestine, sutured the sphincter and removed the piles with Pacquelin cautery, with excellent results.

Dr. J. Lang reported a case of *gall stones*, in a woman, which for years had given rise to occasional attacks of pain, always yielding to medication. A few months ago the patient was treated elsewhere by massage and cold packings, with the result that, when Dr. Lang saw her again, she had pleurisy, thrombosis of right arm, followed by thrombosis and phlebitis of right leg with intense swelling, with weakened action of the heart, to which the patient succumbed. The autopsy revealed a great number of small, and a few larger, gall stones, and pus in the gall bladder. One of the large ones lay on an ulcerated place of the wall. Lang attributes the complications to exposure and mechanical interference.

Dr. C. Zimmermann reported a case of *cholesteatoma of the middle ear* in a very emaciated young man. There was a fistula on the mastoid process. Three weeks ago Z. performed the radical operation, according to Stacke, and laid open the posterior cranial cavity, which also contained abundant cholesteatomatous matter. He intends to leave the posterior wound open, as, from his experience, this is sometimes preferable in cholesteatoma in order to prevent relapses. The patient is recovering rapidly.

C. ZIMMERMANN, Secretary.

CURRENT LITERATURE.

PEDIATRICS.

T. H. Hay, M.D., R. C. Brown, M.D.

A report upon the results with different kinds of pure and impure milk in infant feeding in tenement houses and institutions of New York City: A Clinical and Bacteriological Study—WM. H. PARK AND L. EMMET HOLT (*Medical News*, Dec. 5th, 1903) present a most exhaustive report, of which the following is a summary. The kinds of milk used were: 1, Store milk; 2, condensed milk; 3, bottled milk; 4, milk from central distributing stations, and 5, best bottled milk.

(1) During cool weather neither the mortality nor the health of the infants observed in the investigation was appreciably affected by the kind of milk or by the number of bacteria which it contained. The different grades of milk varied much less in the amount of bacterial contamination in winter than in summer, the store milk averaging only about 750,000 bacteria per c.c. (2) During hot weather, when the resistance of the children was lowered, the kind of milk taken influenced both the amount of illness and the mortality; those who took condensed milk and cheap store milk did the worst, and those who received breast milk, pure bottled milk, and modified milk did the best. The effect of bacterial contamination was very marked when the milk was taken without previous heating; but unless the contamination was very excessive, the effect was only slight when heating was employed shortly before feeding. (3) The number of bacteria which may accumulate before milk becomes noticeably harmful to the average infant in summer, differs with the nature of the bacteria present, the age of milk, and the temperature at which it has been kept. When milk is taken raw, the fewer the bacteria present the better are the results. (4) When milk of average quality was fed sterilized and raw, those infants who received milk previously heated, did, on the average, much better in warm weather than those who received it raw. (5) No special varieties of bacteria were found in unheated milk which seemed to have any special importance in relation to the summer diarrheas of children. The number of varieties was very great, and the kinds of bacteria differed according to the locality from which the milk came. (6) After the first twelve months of life, infants are less and less affected by the bacteria in milk derived from healthy cattle. When the milk had been kept cool the bacteria did not appear to injure the children over three years of age, at any season of the year, unless in very great excess. (7) The use, for infants, of milk delivered in sealed bottles, should be encouraged whenever this is possible, and its advantages duly explained. Only the purest milk should be taken raw, especially in summer. (8) Since what is needed most is intelligent care, all possible means should be employed to educate mothers and those caring for infants in proper methods of doing this. (9) Bad surroundings, though contributing to bad results in feeding are not the chief factor. It is not, therefore, merely by better housing of the poor in large cities that we will see a great reduction in infant mortality. (10) Close

percentage modification of milk, although desirable in difficult cases, is not necessary to obtain excellent results with the great majority of infants, and a certain adjustment of a healthy infant to its food is usually soon secured. (11) The injurious effects of table food to infants under a year old, and of fruits to all infants and young children in cities, in hot weather, should be much more generally appreciated. (R. C. B.)

Two cases of General Gonococcal Peritonitis in young girls under Puberty.—W. P. NORTHRUP (*Arch. of Pediat.*, Dec., 1903) reports two cases in the same family, ages nine and eleven years. The second case developing one week after the other. Case A showed symptoms referable to the appendix and was operated upon. The intra-abdominal conditions presented extreme injection of the peritoneal vessels and a few drams of straw colored fluid deep in the pelvis, but no obvious inflammatory changes. The appendix was healthy; the tubes and ovaries were not removed. The early symptoms in this case were of abrupt onset, pain in abdomen, tenderness most marked in right iliac fossa, moderate distention, vomiting once, painful micturition, ghastly pallor, marked prostration, extreme relaxation, temperature 104½° F. The vulvo-vaginal discharge was thick and creamy and contained gonococci. The patient recovered without incident; vulvo-vaginal discharge continued three months. Case B presented similar symptoms to case A except greater vomiting, location of tenderness and pain was in the region of the spleen, and temperature was not above 102.4°. Vulvo-vaginal discharge persisting for two months.

Cultures of fluid found in abdomen of case A were not taken, but the writer argues—"as to the connection between the vulvo-vaginitis and the peritonitis, the presumption amounts to conviction that the infecting agent was propagated thither by way of the uterus and tubes." In commenting on the histories of these and other recorded cases, the writer calls attention to the sudden onset, abdominal pain, vomiting, rapid rise of temperature to the vicinity of 104°, after two or three days dropping to 100.5°, to 102°, continuing about two weeks; pulse out of all proportion to temperature, 140-150; the respiration, rapid thoracic, from 30-50. Under diagnosis he says, "Appendicitis requires first to be ruled out, it is the most common; pneumococcus peritonitis must be considered as well as forms of general septic peritonitis," and adds, "the best suggestion I can make is, when a young girl presents abdominal symptoms having explosive beginning, examine for vulvo-vaginal discharge. If gonococcus is identified, defer operation." (T. H. H.)

The Reduction of Infant Mortality in the City of New York—ROLAND B. FREEMAN (*Medical News*, Sept. 5th, 1903) discusses the reduction of infant mortality and the agencies which have brought it about in New York City. With a series of tables and charts he shows the comparative mortality in the last ten years. His conclusions are as follows: (1) The infant mortality of all countries is very high, and this is shown to be unnecessary by the fact that infants that are well cared for show a very low mortality. (2) Defective feeding is the active cause, and heat, humidity and bad surroundings are the accessory causes that contribute to the high mortality. (3) There has been a marked decline in infant mortality during the last ten years in the United States, and especially in New York City, due, for the most part, to the decline in mortality from summer diarrhea. (4) This striking decline

in infant mortality is due to many agencies. The general adoption of Pasteurization and sterilization of milk for infant feeding is by far the most important of these, and applies to New York City and the whole of the United States. Other agencies in New York City are the improved city administration, the milk inspection of the Department of Health, the Strauss Milk Charity, the fresh air work of St. John's Guild and similar charities, cleaner streets and asphalt pavements, the new small parks, play grounds and recreation piers, the improved tenements, and the use of diphtheria antitoxin.

(R. C. B.)

THERAPEUTICS.

Chas. H. Stoddard, M.D., B. L. Schuster, M.D.

Natural Albumen and Albumen Preparations as Diet for the Sick.— BERMBACK (*Therap. Monatshefte*, Aug., 1903) says that a diet consisting largely or exclusively of albuminous food is most often needed in cases requiring a special diet, but is only applicable for a very short time. Where there is loss of tissue albumen, and where fats and carbohydrates are contraindicated, such a diet should be used. The diet is indicated in pulmonary tuberculosis, myocarditis, obesity, chlorosis, essential anemia, diseases of the stomach, and hysteria.

The three most important means of giving albumen is by use of milk, eggs, and meat. Cow's milk is cheap and easily assimilated and has a high calorific value. In large quantities, however, it throws considerable work on the circulatory system. Eggs are easily digested and largely assimilated. Meat furnishes the largest amount of albumen and has the highest calorific value. The author supplements these articles by the use of Tropon and Eucian. (B. L. S.)

Dietetic Treatment of Chronic Nephritis.— ANDERS (*Amer. Med.*, Oct. 31, 1903). This demands that we meet the requirements of nutrition plus the loss of albumen through the kidneys. Drugs are only of real value, in cases secondary to syphilis, malaria or chronic suppuration, etc.; usually they cause more harm than good. Hygienic measures such as warm baths, climatic change, muscular exercise, etc., are important adjuvants to the treatment.

Diet is of major importance and prevents or retards contracted kidney and anemia. Food must be digestible. Exclusive milk diet contains too little carbohydrate and iron. The usual prescription of milk diet and large quantities of fluid overburdens the already strained heart. Meats must be restricted. There is no evidence that red meats are more harmful than others. Give whole milk (not skim milk, as fat is essential) diluted, fruits, green vegetables and rice freely. Make diet conform nearly to patient's usual dietary and have meals small and given at three hour intervals.

Van Noorden finds that kidneys have less power of secreting foreign material such as potassium iodide, sodium salicylate and other drugs than for the products of metabolism Important diagnostically and in watching the progress of treatment, are cryoscopy of urine and of blood, careful record of the body weight and frequent blood examinations for the state of anemia.

(C. H. S.)

Acid Phosphate of Soda in Alkalinity of Urine.—R. HUTCHINSON (*Brit. Med. Journal*, May 30, 1903) says that acid sodium phosphate has greater acidifying effect on the urine than any other drug. It is especially of use as an adjuvant for urotropin, for the latter acts best in acid urine. It is soluble freely in water and is given in doses of 30 to 60 grains every three hours until the effect is shown by litmus paper when a smaller amount continues the effect.

WHEELER (*Med. Press*, Sept. 9, 1903) details a case of cystitis, in an aged man, complicated with hemorrhages, which was successfully treated with adrenalin locally, and this drug internally. In three cases acidity was produced in twenty-four hours. He cautions prescribers to see that the chemist does not use the official sodium phosphate, but the acid salt, the normal urinary acidulant. (C. H. S.)

Cause and Prevention of Iodism.—LESSER (*Deutsche Med. Wochenschr.*, No. 46, 1903). It was formerly thought, and many believe to-day, that the iodides entering the system are decomposed and that the free iodine causes the intoxication. Lesser, by extensive experiments, shows that the iodides given internally circulate as iodin-alkaline salts and that the symptoms of iodism are really due to the rapid absorption of excessively large quantities of iodides into the circulation. It would be more correct to apply the term iodin-alkalism to this condition, for the prevention of which he recommends: (1) Administering iodides in mucilaginous substances, thus delaying their rapid entrance into the circulation. (2) The greater the idiosyncrasy the smaller should be the doses, frequently repeated. The rapid elimination will prevent intoxication and the amount of iodides circulating will remain fairly constant. (3) Administration of iodine preparations per rectum. Zeissl recommends: R. Natrii iodati 2.0; Aq. 30.0; Tinct. Opii. gtt. 5. Here also resorption is delayed. (4) Use of substitutes for the alkalies (iodin-albuminates and fats), which are gradually changed to alkalies, but contain proportionately less iodine. (5) Iodipin injections. Absorption is slow but continuous. These are especially indicated where there is a marked idiosyncrasy. (B. L. S.)

Sodium Sulphanilate in Exophthalmic Goitre.—KIRNBERGER (*Therap. der Gegenwart*, Oct. 1903) starting from the hypothesis that the nervous phenomena presented by the subjects of Basedow's disease are due to iodic auto-intoxication caused by excessive production of iodothyelin by the hypertrophied thyroid gland, has recommended the use of sodium sulphanilate in these cases. Ehrlich and Kronig had previously recommended sulphanilic acid and its sodium salts for iodism. Kirnberger gives his patients 10 grammes (150 gr.) of sodium sulphanilate daily. It causes gain in flesh, gives restfulness and vigor, and a sense of well-being, and notably diminishes the tachycardia. But in most cases the remedy has no influence on either the hypertrophy or the tremor. The effects appear to be simply palliative. (C. H. S.)

Lactic Acid for Pruritus.—M. DE CASTLE (*Jour. de Med. et de Chir. Pract.*) uses the above drug for localized or general pruritus. One case of vulvar pruritus of four years' standing was promptly cured and others all non-glycosuric, showed equally gratifying improvement. (In the treatment of other itching affections of the skin, notably urticaria, acids both internally and externally are of marked service.) (C. H. S.)

DISEASES OF THE EYE, EAR, NOSE AND THROAT.

C. Zimmermann, M.D., G. E. Seaman, M.D., H. B. Hits, M.D., N. M. Black, M.D., J. S. Barnes, M.D.

Ocular Headache and other Ocular Reflexes.— M. W. ZIMMERMAN (*N. Y. Med. Jour.*, March 21 and 28, 1903) presents a statistical study of 2,000 cases of ocular headache and other ocular reflexes in hospital and private practice in which the cases are studied from every possible standpoint. He says that the time at which an ocular headache appears, varies very much. It usually bears a direct relation to the eye work of the patient, appearing most frequently after the eyes have been used for some hours. Early morning headache from use of the eyes the previous evening is common. Intense watching of comparatively distant objects, attendance at the theater, etc., are frequent exciting causes.

Car sickness is often due to errors of refraction. The influence of ill health as a frequent predisposing cause is pointed out. Conditions of lowered resistance after severe illness, pregnancy, prolonged lactation and post-influenzal conditions are given as determining factors in many cases of ocular headache.

Regarding results, the author says that careful optical treatment of ametropia is the most satisfactory therapeutic measure in the whole field of medicine. 86.1 per cent. of the cases studied and followed to the end resulted in practical cure. (G. E. S.)

Brief Consideration of Prognosis in Chronic Suppurative Otitis.— THOMAS J. HARRIS (*Annals of Otology, Rhinology and Laryngology*, March 1903) has for a period of eighteen months, tested the value of treatment in all the suppurative cases at the Manhattan Eye and Ear Hospital. All surgical measures indicated, such as removal of adenoids, extraction of polyps and granulation tissue, were at first performed. It was then sought to discover, irrespective of any necrosis of the ossicles, the result of medicinal treatment alone. The following therapy was employed in the cured and relieved cases: Hydrogen dioxide in 20; formalin in 9; borolyptol in 3; camphoroxol in 5; menthoxol in 1; protargol in 1; boric acid in alcohol (sat. sol.) in 6.

Over 50 per cent of the cases were reported cured; 38 per cent. improved. Both the method by irrigation and the so-called "dry method" were employed. Harris considers the latter the ideal method, but experience proved it to be impracticable at the clinic and a combination of the two was found to serve the best. From the experience gained with these cases he offers in conclusion the following deductions:

1. Chronic otorrhea in a large percentage of cases is amenable to suitable medical treatment.

2. In addition to proper attention of a general character and to the naso-pharynx, peroxide of hydrogen with or without formalin solution, gives the best results, all minor operative procedures of course first being attended to when necessary

3. The results of such treatment are in a good number of cases permanent.

4. The risk of an uncured otorrhea with good drainage is relatively very small ($\frac{1}{2}$ or $\frac{3}{4}$ of fatalities).

5. Medical treatment failing, after a suitable interval of time, the danger of fatal complications in absence of all symptoms should be laid before the patient and the promise of relief by operation stated.

6. When there is no good reason to the contrary, such as intracranial or mastoid complications, the intra-tympanic method by ossiculectomy should be preferred, (a) Because its results as regards the cure are equally good. (b) The risk to loss of hearing is vastly less. (c) The danger of unpleasant sequelæ, such as facial palsy is avoided. (d) The possibility of prolonged after treatment is obviated.

7. The radical operation is not without risk to life.

8. When ossiculectomy fails or mastoid or other symptoms exist pointing to extension of the disease into the bone, the radical operation then becomes the suitable and valuable method of relief.

9. The protecting and assisting power of nature is never to be lost sight of. (J. S. B.)

Clinical and Anatomical Contributions to Metastatic Ophthalmia.—BIETTI (*Supplement to Vol.* 41 *of Klinische Monatsblaetter fur Augenheilkunde*) gives details of three cases of metastatic ophthalmia of rare forms with histological descriptions. In the first a bilateral metastasis of pneumococcal origin apparently started from the choroid, in the second restitution of vision after amaurosis, with healing of a total bilateral metastatic detachment of the retina, was observed, and the third case, a puerperal infection, took a comparatively benign course, without leading, as usually, to perforative panophthalmitis. (C. Z.)

Contributions to the Pathology of the Optic Nerve in Brain Diseases.—YAMAGUCHI (*ibidem*) reports a case of relapsing choked disc with thrombosis of the central retinal vein in sarcoma of the frontal lobes. The intense swelling of the disc set in after atrophy and degeneration of the disc with shrinkage had existed for several years, and was due to thrombosis of the central vein, in consequence of strangulation by cicatricial tissue in the obliterating intervaginal space. (2.) Atrophy of the optic nerve and anomalies of menstruation in basal tumors. Four cases of tumors at the region of the chiasm with simple atrophy of the optic nerves are reported as illustrations of the relatively frequent lacking papillitis in tumors of this region, which may be explained by obstruction of the optic sheaths, by compression, cell-proliferation, etc. The etiology of amenorrhea in these cases had to be attributed to the intracranial tumors. Thus Y. warns against too readily assuming an amenorrhea as the cause of atrophy of the optic nerves. (C. Z.)

Arthritis in Blennorrhea Neonatorum.—A. DAHLSTROM (*ibidem*) compiled 18 cases from literature and 2 of his own observation. The conveyance of gonococci to the joints may take place from a possible simultaneous infection of the urogenital system, from corneal ulcers, or from the conjunctiva without any lesion of continuity through the lymphatics and the blood. The latent stage of gonorrhoic arthritis probably does not exceed 4 to 5 days. (C. Z.)

Contribution to Affections of the Optic Nerves in Purulent Cerebrospinal Meningitis.—DE LIETRO-VOLLARO (*ibidem*) reports 5 cases of meningitis, terminating fatally, with anatomical descriptions of the optic nerves. The obturating infiltrations of the optic sheaths at the region of the optic

foramen stops the free communication between intracranial cavity and intravaginal spaces and thus prevents the entrance of pus germs into the latter. L. infers from his cases a corroboration of the opinion of Axenfeld that the purulent ophthalmia in cerebrospinal meningitis is owing to metastasis and not to a direct propagation through the optic sheaths. The enormous perineuritic and interstitial infiltration of the optic nerve within its osseous canal is important for the bilateral retrobulbar blindness, so-called "basal," remaining for weeks after meningitis, mostly with negative ophthalmoscopic condition, immobility of the pupils, and frequently with ultimate recovery. L. does not doubt that it is due to the affection in the optic canal. (C. Z.)

Mydriatics.— C. A. OLIVER (*Annals of Ophthal.*, Oct., 1903) in an excellent article, discusses the various drugs used for this purpose, largely from the standpoint of his own experience. He calls attention to their local sedative and analgesic action in conjunctival, lachrymal and corneal diseases and to their value as cycloplegics not only in refraction work, but in the treatment of diseases affecting the deeper structure of the eye. He says they are valuable when carefully guarded and constantly watched in temporarily continuing useful vision in some forms of cataract, especially the nuclear variety. He discusses fully the dangers of the unwise use, and over-use of these remedies. (G. E. S.)

Embolism of the Central Artery of the Retina from Paraffin Injection Into the Nose.—L. M. HURD and W. A. HOLDEN (*Medical Record*, July 11, 1903) reports a case that adds another to the list of unfortunate results following paraffin injections. Immediately following the injection of paraffin and ordinary white vaselin, with a melting point of 110 deg. F., for the correction of the deformity of a saddle-shaped nose, the patient became blind in his right eye. Ocular examination twenty-five minutes after the injection, showed the media clear and the retinal veins normal, but the main inferior branch of the central artery and its deviations were empty and collapsed, being recognizable only by the faint white outlines of their lateral walls. The main superior branch contained some blood, but when gentle pressure was made upon the eye-ball, the blood column here broke up and the blood flowed backward into the central artery. Efforts to dislodge the embolus and force it forward into one of the branches of the artery, by the use of heart stimulants and massage, and thus restore partial vision, were unsuccessful. The eye remained blind.

Other similar cases in literature are reviewed. The obvious lesson taught by these is that loss of vision, and even of life, may follow the injection of paraffin into a vein. This danger could be partly avoided, doubtless, by performing aspiration after the introduction of the needle, and if there was no evidence of penetration of a vein, injecting the paraffin through the needle without moving it. There would remain, however, the possibility that the needle had passed entirely through and beyond a vein, and then the paraffin when injected under high pressure might in its ramifications, pass backward along the course of the needle and thus gain entrance to the vein.
(J. S. B.)

THERAPEUTIC NOTES.

THE DANGERS OF CONSTIPATION.—Ignorance is dangerous, but negligence is worse and almost criminal. It is surprising how many practitioners are either ignorant of or careless about the dangers of constipation, although the symptoms are so marked that even a not very keen observer cannot very well leave these danger signals unheeded. The outward manifestations are obvious in pimples, boils and eczema. The organic manifestations are indicated by sick headache, foul breath, coated tongue, nausea, flatulence and so on. Ignorance of the proper method of correcting constipation is exemplified in the use of drastic purgatives which excoriate, gripe and weaken still more the existing impaired peristalsis. A remedy acting at the same time as a cholagogue and hydragogue, toning up the atonic condition of the intestines and at the same time flushing them without pain and disinfecting the alimentary and urinary ducts, will be found the only correct means to actually and permanently remove the dangers of constipation. Such a remedy is found in Kutnow's Improved Effervescent Powder, which is composed of the health-giving ingredients of Europe's most celebrated Mineral Springs, acts gently, but effectively on the liver, gall bladder, kidneys and bladder, destroys and removes all toxicant micro-organisms and restores the natural functions to healthy vitality. The medical opinions about Kutnow's Powder are undivided all over the civilized world and the highest authorities have been endorsing its merits for the corrections of a faulty metabolism and the restoring of an impaired peristalsis.

THE TREATMENT OF NASAL CATARRH.—MANNON (*Cincinnati Lancet-Clinic*) finds no danger whatever from the use of the nasal douche provided ordinary care is taken and a proper solution is employed. The charge that post-nasal douching is prone to excite inflammation of the middle ear he does not find sustained. All leading specialists employ this method of treatment in the posterior as well as the anterior nares with equally good results. The doctor has had chronic nasal catarrh of many months' duration yield to douching when heroically employed. Listerine, to which a small quantity of bicarbonate of soda has been added, is his main stand-by. If hemorrhage is a controlling feature he uses instead a saturated solution of tannic acid to each ounce of which ten grains of carbolic acid has been added. When the tendency to bleed ceases he returns to the listerine solution. Treated in this way the most pronounced cases yield in three or four weeks and are not prolonged by complications or sequelæ.

REMARKS ON GLYCO-THYMOLINE.

W. R. D. BLACKWOOD, M. D.,
PHILADELPHIA, PA.

For many years this preparation has been one of my mainstays in diseases of the mucous membranes, and it has held its place despite the trials of many other agents warranted to supplant it by the advocates who decried

Glyco-Thymoline when I spoke of its virtues. Space is now getting too valuable to waste with long detailed descriptions of separate cases, and anyhow I never did write in that manner—I think general remarks about agents is the better way, and we need this more than stories of symptoms and temperatures, with daily alterations. No class of maladies is more troublesome than disorders of the mucous membranes, and none more difficult to eradicate thoroughly, and we have been put to our wits' end many times for remedial agents in such cases. The local treatment of catarrhs is frequently disappointing, and none more so than that prevalent one—post-nasal catarrh. Unless we can get an alterative condition established little good is done, and nothing has been of greater service to me than Glyco-Thymoline, locally and internally, in several hundreds of long-standing and severe cases of this intractable and common affliction. I have come to regard this preparation as a standard and almost routine remedy; I seldom care for a post-nasal trouble without prescribing it at the onset, and if I don't it is not long before it comes into use. It is just alkaline enough; just so as to the dialysis (the action locally with exactly the right amount of fluid excretion through the diseased membrane), just enough astringent without drying the parts; and just the right thing in the direct line of reparative work—it sets up tissue building soon after the membrane gets somewhere near its right shape. Many things are employed in catarrh, but I firmly believe that if I was confined to one agent only, that would be Glyco-Thymoline. For years I used the so-called antiseptic tablets of boric acid, salt, glycerin, etc., and with good results, but for a long time past this is thrown aside and the Glyco-Thymoline takes its place. I use it in about half-strength with a "Bermingham" douche, and from twice to four times daily. With this, in bad cases, I give it internally, adding to it, or giving separately, mercuric bichloride, and if done separately the menstruum is compound syrup of stillingia. In presumed syphilitic persons I always do this. In gastritis, chronic enteritis, vaginitis, gonorrhea, and in recurring attacks of what too many physicians deem appendicitis, I use this agent freely, and always with good results. As a local application to foul ulcers, and especially to hemorrhoids, I think this preparation is very good. In the nasty leg ulcers which now and then defy all remedies Glyco-Thymoline does wonders—it can't do harm any time, and I am almost persuaded to give it in all instances. In bronchitis and asthma it is fine; in spasmodic croup it fills the bill nicely; it does well in venereal disorders locally, and in balanitis it stops the trouble at once.

I have used more or less of the two elegant preparations, Peacock's Bromides and Chionia, during the last two or three years, and must say with very satisfactory results.

B. A. Bobb, M. D.

Mitchell, S. D.

I have used Seng and Cactina Pillets in my practice and find that they are all that has been claimed for them. Seng is excellent in those forms of indigestion following chronic catarrh of the stomach and bowels. I like the effect of Cactina Pillets in weak heart. I have used it for the last seven years.

Crawford, Tex. A. M. Armstrong, M. D.

THE WISCONSIN
MEDICAL JOURNAL

FEBRUARY, 1904

STRANGULATED HERNIA.*

BY PHILIP R. FOX, M. D.,
MADISON.

In calling to your attention the subject of strangulated hernia, I feel that no apology is necessary, though I have nothing new or remarkable to offer you. However, the condition is met with so frequently and calls for such quick decision and thorough carrying out of measures for its relief, that I believe some benefit may be derived from again discussing the subject. I will not tire you by enumerating the many causes, predisposing and exciting, nor will I mention the many varieties of hernia which may become strangulated. Suffice it to say that all strangulated herniæ call for quick relief, and generally speaking, are all amenable to the same treatment, *viz.*, taxis, or if that fails, and I believe it generally does fail in cases of true strangulation, then operation.

Most frequently in my experience the victim of this accident has been an elderly person who has had a hernia for some time, possibly for years, and has controlled it with a truss. Some extra exertion, a slip, misstep or fall, possibly an attack of indigestion or constipation, or as in a recent case of my own, an attack of acute bronchitis with the consequent coughing, sufficed to produce strangulation. The symptoms are those of intestinal obstruction and, depending on the degree of constriction and the part constricted, are of varying degrees of severity. Strangulated hernia is by far the most frequent cause of intestinal obstruction, and on that account in cases presenting symptoms of obstruction, we will first examine the usual sites of hernia.

*Read by title at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 4, 1903.

The diagnosis of strangulated hernia is generally easy, but there are exceptions. However, this paper has more to do with treatment than with diagnosis. Having satisfied ourselves that we have a strangulation to deal with, what shall we do? To quote Uncle Allen of old Rush, "it depends entirely on what is the matter," that is, what is the present condition of our patient? How long has his hernia been strangulated? What are its probable contents and what is their probable condition?

1. Our first efforts will be to reduce the hernia by taxis applied for only a few minutes and with the greatest gentleness. If that fails and the strangulation has continued for not more than two to four hours, with the patient—comparatively speaking—in good condition, I think we may sometimes derive great benefit from applications of heat or cold, preferably the latter in the form of ice, which, with a hypodermic of morphine to quiet the frequently violent peristalsis, will sometimes so diminish the size of the hernia and relax the constricting part that reduction by taxis may be accomplished. However, we must bear in mind that though gangrene rarely occurs in less than twenty-four hours, still it has been seen after four hours of strangulation. We must also bear in mind that every hour of strangulation lessens the chance for recovery. So the surgeon must be guided by the urgency of the symptoms as to whether he will delay or immediately proceed to operate. Of course, in herniæ that have been strangulated for more than eight to twelve hours, we would not think of delaying operation longer than is necessary to prepare for it. In using taxis I would say that in my opinion it should never be continued for more than ten minutes at a time and only with the greatest gentleness, always bearing in mind that the contents of the hernial sac are already in a weakened condition and the slightest roughness may do irreparable damage.

2. After having applied heat or cold, whichever we prefer, for not more than two hours, we may again, under deep narcosis, apply taxis. If, however, the taxis fails us a second time, we must at once proceed to operate. If the hernia has been down and strangulated for more than six hours I believe our duty is to operate at once.

Our preparation of patient and materials, without occupying any unnecessary time, should be thorough in its aseptic detail, for we are to enter the peritoneal cavity and we may encounter one or several of the most perplexing problems working surgeons have to deal with. Our patient having been anesthetized, we divide the constriction and reduce the hernia, after having first opened the sac and assured ourselves that the external viscera are in proper condition to be returned

to the abdominal cavity. I believe at the present time, with our antiseptic technic, no surgeon would return a hernial sac without inspecting its contents, and there is good reason for this. Sometimes the cause of obstruction is found in the sac itself or in adhesions between the different contents of the sac and these would escape detection if the sac were not opened. Then, of course, if any part of the hernial tumor is gangrenous, the gangrenous part must be removed, and if in the bowel, a resection must be made or an artificial anus established. The latter is very undesirable, and with such rapid means as the Murphy button for anastomosis it would seem to be rarely necessary. The surgeon is usually called to the case after the hernia has been strangulated for anywhere from twelve to forty-eight hours, or even longer.

3. The patient may be old or debilitated, but even then, though the chance for recovery may be small, I believe we should operate unless the patient be actually moribund. It may not be good for the surgeon's reputation, but it will save some few lives as instanced by three cases of my own which I report to you.

4. They demonstrate some of the various conditions which are likely to be met with in strangulated hernia.

Case No. 1. Lady, 73 years old. Operated on fifteen years ago for strangulated right femoral hernia. No attempt made at radical cure. I first saw the case about five years ago when she had a hernial protrusion about 4x7 inches in diameter. She consulted me at that time on account of a prolapsed uterus, but her general condition was so poor that I refused operative treatment, being satisfied to do the best we could with palliative means. February last I saw her in consultation after she had had no bowel movement or even passage of gas for five days. She had been vomiting, vomites not fecal, but having a distinctly stercoraceous odor. The hernial tumor was very tender, slightly swollen, on percussion dull in some places, tympanitic in others. The lady's condition was such that there seemed to be absolutely no chance for her recovery. But she and her friends pleaded so hard for operation that I proceeded. The sac of this old hernia was like a piece of leather and under the knife it felt like fibrous tissue. It contained both bowel and omentum. The former adhered to the sac by about seven inches of its length. The very dense adhesions made me fearful of tearing the bowel if I attempted to separate them, so with the scissors I cut it loose, leaving a part of the thickness of the sac attached to the bowel. The raw surfaces of the latter were doubled upon themselves with a running catgut suture. This hernia was constricted for five days, but there was no gangrene, though there was a deep and dark furrow marking the point of constriction. The hernia was reduced and the opening closed with a flap of fascia from the adjacent muscle. She made an uneventful recovery. Of course, the degree of constriction was not so severe as in the next case.

Case No. 2. The second case was a young unmarried woman, who had right femoral hernia for thirty-six hours. It seemed to have been strangulated from the first moment of its appearance. Operation revealed nine inches of gangrenous gut, which was removed, making an end-to-end anastomosis. This patient had considerable pain and on the second day a temperature of 101° for a few hours. After that she proceeded to get well.

I speak of these two cases in particular on account of their opposite conditions: one in an old person with an old hernia with strangulation continuing for five days without producing gangrene; the other in a young robust person, of recent occurrence, becoming strangulated almost immediately and becoming gangrenous in thirty-six hours. They prove that we do not know the exact conditions in each individual case and that our cases of strangulated hernia must be relieved without delay.

Case No. 3. Unmarried woman, 38 years of age. For some years had noticed that at times hard work produced a pain and some slight swelling in the left inguinal region. Pain and swelling always disappeared after a night's rest. She had occasion to lift a heavy box and immediately felt the pain much more severe than ever before, producing nausea, vomiting and great depression. She went to bed and after waiting three or four hours, the pain gradually increasing in severity, she sent for her usual medical attendant who diagnosed an inguinal hernia which he reduced after considerable difficulty.

I first saw the case in counsel three days after the first appearance of hernia. All the symptoms of strangulation persisted, though the hernia was reduced, or at least returned to the abdominal cavity. There was some rise in temperature, high pulse rate, considerable tympany over the abdomen and frequent vomiting of material having a decidedly stercoraceous odor. Laparotomy seemed to promise the only chance for relief and we proceeded to open the abdomen. A small knuckle of bowel not more than two inches in length was found just above the right inguinal ring still retained in a sac of peritoneum, the neck of which, with some old and dense adhesions between the two limbs of the knuckle of bowel so constricted the latter that it was completely gangrenous. The sac with the dead gut was excised, the bowel being united by end-to-end anastomosis. After two days of shock, prostration, and possibly some sepsis, the patient made a smooth recovery. Unfortunately, however, she has now a ventral hernia in the line of incision due to too great haste in closing the laparotomy wound on account of her alarming condition.

I have offered you this paper not as I said in opening, because it contains anything new or remarkable, but because I hope it may bring out some discussion which will enable us the better to care for our cases.

SYPHILIS HEREDITARIA TARDA.

ISAAC A. ABT, M. D.,
CHICAGO.

Cases of hereditary syphilis in which symptoms of the disease manifest themselves during the late period of childhood, during the period of puberty, or adult life, are spoken of as syphilis hereditaria tarda. Fournier believes that all syphilitic cases should be included in this class which originate from syphilitic parents, and in whom the disease manifests itself after the third year or during childhood, youth, or adult life, no matter whether the individual showed symptoms of congenital syphilis during infancy or not.

There are two classes of cases. In the first class, the patient has remained in perfect health without any evidence of hereditary syphilis, until an advanced period of childhood, or even later, when one or more of the symptoms of late hereditary syphilis develop. In the second class, the late symptoms have been preceded by the usual symptoms of congenital syphilis as it occurs in infancy. There is no doubt that cases of the latter class occur commonly enough, and syphilographers are agreed that the disease may remain for a long time latent, and that late manifestations may occur which are characteristic enough to permit this special designation.

So far as the first variety is concerned, there is considerable discussion as to whether or not it occurs. Fournier, Neumann, Hebra, Sigmund and others believe that these cases occur; while Kaposi, Bärensprung, Lange and others believe that they are not authentic. They say that if this disease be congenital, there must have been infantile manifestations.

It must be conceded that the eruption of congenital lues in infancy may be so slight as to be easily overlooked, and the other early symptoms like coryza, fissures, seborrhea, coffee-colored skin, may be trivial. Hence there may have been a slight infantile manifestation of the disease and it may have been overlooked.

Again there are authorities who take the extreme view that the late symptoms of congenital syphilis which belong to the first variety, are not congenital in origin at all, but are the tertiary form of the acquired disease. Henoch, for example, takes this view. He says he would not pronounce a case as late hereditary syphilis, without early manifestations, unless he himself had observed the child from birth and found it free from every syphilitic taint during infancy. He would satisfy himself that one or both parents were syphilitic and

he would desire to exclude the possibility of the child having acquired the infection. He has never been able to do this in a single case. He concludes that not a few of the cases that have been reported as late hereditary syphilis without infantile manifestations, are in reality cases of acquired syphilis. It is also true that in the late cases which show tertiary manifestations, and who give an unreliable history, it is almost impossible to say whether one has before him a case of congenital or acquired syphilis with tertiary phenomena. But there are well authenticated cases in which the late symptoms were manifestations of a congenital syphilis, in which no early signs were present.

Kassowitz and Hochsinger have taught us that congenital syphilis may remain latent for a long time, and finally present late manifestations which resemble the tertiary symptoms in the adult. They collected 63 cases of hereditary syphilis during the period of infancy. Fifty-two of these were three months old or less. Some of these cases were under observation for four years; 34 were under observation between six and twenty years. Notwithstanding that 34 cases were under continuous treatment, 11, that is, one-third of the number, showed tertiary symptoms between the seventh and nineteenth years. The late manifestations consisted of gummata in the bones, particularly the tibia and nasal bones, the hard palate; also on the tongue and pharynx. Glandular enlargement was observed, as well as retarded mental and physical development.

AGE OF OCCURRENCE.

This disease may begin in the third year. It increases in frequency from the fourth to the tenth year, and reaches the maximum from the eighth to the tenth, diminishing in frequency from this time. Statistics show that seven reported cases occurred after the fortieth year. About three-fifths of the cases which have been collected were females.

SYMPTOMS.

Bone Lesions. In 212 of Fournier's cases, diseases of the bone occurred in 82, and in 11 of Hochsinger's, bone lesion occurred four times; thus these were present in two-fifths of the cases. Bone lesions occur most frequently between the fifth and twelfth years.

Periostitis is the most common form of bone involvement. It attacks most commonly the tibia in the lower third, over the anterior surface. The forearm, however, or the lower half of the humerus may be involved in the characteristic way. The periostitis manifests itself by the gradual development of a circumscribed thickening of the bone. During the first stage of the process, pain is present. This is usually

worse at night, and is commonly thought to be rheumatic in nature. After the process has been established for some time, the periosteum thickens. One finds at this stage that pressure over the bone is as a rule not painful, though there may be areas which are sensitive. The skin over the thickened bone is not reddened. The course of this thickening is chronic, and tends to deformity. It goes on for months or years, the deformity becoming more and more marked. As has already been noted, the anterior portion, or the crest of the tibia, is the most frequent seat of the disease. When it is involved the anterior border curves forward, at least in a certain area, and a deformity results which Fournier believes resembled a saber blade; hence the name, "saber-blade deformity." In some cases the bone is bent inward at its lower third, resembling somewhat a rachitic curvature. In others, the entire bone is affected so that it is enlarged to nearly twice its normal dimensions.

Besides the hyperplastic form of periostitis which results in the over-production of bone, and deformity, a gummatous form may occur. These gummata are localized swellings of variable size; they are found over the tibia, but may involve also the frontal bone, the sternum, and other bones. At their first appearance, these lesions are very painful. They may remain for years without undergoing any change, or they may disappear even without treatment, leaving an area of excavated bone which becomes adherent to the overlying skin. Most frequently, however, the gummata soften in time, suppurate, and break through the skin, giving rise to sinuses which usually remain open and discharge for a long time. These sinuses are usually multiple. As has already been said, they may occur on the tibia; it is not rare, however, to find them involving the cranial bone.

A gummatous osteomyelitis has been observed as a late symptom of hereditary syphilis. It attacks by preference, the epiphyses in the neighborhood of the joints.

The *joint affections* are not uncommon. They begin with severe pain, with little or no swelling; later on, however, a hydrops is observed. This is usually bilateral. The knee-joint is the most frequent seat, though other joints are not exempt. In other cases the capsule of the joint becomes infiltrated and tense; the swollen joint presents the appearance of a tumor albus. In the syphilitic cases however, the swelling is almost always bilateral, which is seldom the case in tuberculosis. The concomitant signs of syphilis are generally present and assist further in the differentiation between tubercular and syphilitic synovitis. The following case has been under my observation and is of interest in this connection.

W. L. is now about 15 years old. His family history is significant. The father was undoubtedly luetic before his marriage. The mother had two miscarriages. These miscarriages were followed by the birth of a still-born baby. In the course of time, five children were born, and are all living and apparently in good health. The sixth child, our patient, is the youngest, he was born about fifteen years ago. Shortly after his birth the father died suddenly, of a myocardial and vascular degeneration, aged about 49. The child seemed normal at birth, no early signs of syphilis were observed. His development, however, was slow. His nutrition was good; he showed no marked evidences of rickets. His temporary teeth were erupted at a late period and remained for a short time, when they decayed and fell out. His permanent teeth were erupted in the due course of time. The upper incisors were grooved on the cutting edge, the enamel was exposed, and by the time he was 14 years old, four had dropped out. The boy's head is massive; its frontal portion is quadrilateral, the parietal eminences are protuberant, the longitudinal suture is slightly depressed. Intellectually, he is backward, though not idiotic.

At about his tenth year, he complained of pain in his left leg. At this time, the crest of the tibia became thickened and deformed, saber-blade shaped, the region of the ankle joint was also observed to be swollen. About a year later he complained of a pain in his knees. Both knees have been swollen for the past four years, slightly fluctuating, and are undoubtedly distended with fluid. His elbow joints are also involved; in the left one there is great limitation of motion. He has never shown any eye symptoms, nor have there been any ear symptoms. The prolonged use of iodides has brought some relief, though the synovitis in knee and elbow joints continues.

Cranial Localizations. Infantile syphilis leaves the following deformities: (1) Frontal; Olympian forehead, convex in front, high and large; forehead with lateral bosses; keel-shaped forehead with median boss. (2) Lateral and postero-lateral; parietal bosses, transverse enlargement of the cranium, natiform cranium of Parrot; cranium shaped like the buttocks, swollen in the supero-posterior half (occipito-parietal region), with a groove separating the two lateral tuberosities, as the intergluteal fold separates the buttocks. (3) Asymmetry of the cranium. (4) Hydro- and microcephalus.

The Skin. Fournier has described the skin lesions in detail. They usually appear at about the age of puberty. They consist of subcutaneous nodules, are composed of syphilitic granulation tissue of firm consistency. They vary in size from a pinhead to a pea. Their color is brownish red. The nodes not infrequently break down; the defect in the skin is covered by crusts. These nodules arrange themselves in a characteristic way. They group themselves to form a circle or a part of a circle, which may vary in size from a silver dollar to the palm of the hand. Sometimes they assume the form of a semi-circle, or a horseshoe. The semi-circular forms frequently from

contact with one another, form figures, and often present a wreathlike appearance. These figures locate themselves by preference, on the forearms, the face or the legs. These nodules frequently break down to form ulcers. The ulcers have rounded thickened, indurated borders and a base which is depressed and has the appearance of being scooped out. In healing, the ulcer leaves a smooth, white scar.

The eruption resembles lupus more than any other skin lesion, but the nodules of syphilis are hard, dark-colored and tend to arrange themselves in such a way as to form figures. In lupus, the nodes are soft and bright red. The most frequent situation is upon the face or upon the upper part of the legs or thighs.

Nose. The nose is very frequently involved, though for a long time the only symptom indicating a lesion, is a stubborn coryza with much secretion. The discharge is thick and forms crusts, which frequently obstruct the nares. Small gummata form on the mucous membrane of the nose. They remain quiescent for a long time, but are liable to ultimately ulcerate. These ulcers are covered with a dirty-appearing, foul-smelling membrane. The ulcers give rise to the fetid discharge, the so-called "syphilitic ozena."

The anterior nares or the nasal septum may become ulcerated similarly as in an attack of lupus, only that the syphilitic ulceration is less regular; it is, however, much more rapid in its destruction. All the bony structures of the nose may be attacked. The turbinated bones, the vomer and the ethmoid may necrose. In some severe cases the nose may be entirely destroyed in a few weeks. In a majority of the cases with nasal necrosis, the nose presents more or less deformity of the saddle type.

Mouth and Pharynx. In a similar way, gummatous inflammations of the mucous membranes of the gums, pharynx and palate lead to necrosis and perforation.

Larynx. In a few of the reported cases, laryngeal involvement has been noted. Deep seated infiltration and ulceration have given rise to symptoms of laryngeal stenosis during life. If the ulcers heal, scar tissue results, and disturbances of the laryngeal function ensue.

Lymph Nodes. While the lymph nodes are not usually involved in the early manifestations of congenital syphilis, they occur quite commonly as a late manifestation. They enlarge to a certain size and then remain enlarged for years. They do not tend to become painful, and are found most frequently in the neck and below the inferior maxilla. The axillary and inguinal glands are sometimes involved. Enlargement of the mediastinal and mesenteric glands has been observed. The cuboidal glands are sometimes enlarged.

HUTCHINSON'S TRIAD.

Three symptoms which are particularly characteristic for congenital syphilis, were first described by Hutchinson; hence the name. The symptoms are (a) interstitial keratitis; (b) labyrinthine, or central deafness; (c) deformity of the upper incisor teeth.

Teeth. The temporary teeth show no signs which are characteristic for syphilis; they tend to decay early, especially the upper central incisors. In syphilitic infants the formation of gum boils is occasionally observed, with subsequent extrusion of the crowns of the teeth from the abscess sacs. The changes which are noted in the teeth occur in the permanent set, and are manifestations of late hereditary syphilis.

The Deformities of the Teeth. The deformity which Hutchinson has described as characteristic for the diagnosis of late hereditary syphilis, occurs exclusively in the two upper central and permanent incisors. These teeth are distinguished by the fact that they have been both retarded in their development, that they are smaller than the other incisors, and also that they tend to converge. They assume a screwdriver shape, and the free, cutting edge shows a central elliptical concavity. Sometimes some structural changes are noted on the lower incisor teeth. At other times, too, the canines have been supposed to undergo these changes. The enamel is generally deficient in the center of the notch. It is not evidence that congenital syphilis is not present because the teeth do not show the atypical changes described by Hutchinson.

Interstitial Keratitis is probably the most frequent of Hutchinson's symptoms. It usually occurs between the ages of six and fifteen, but is sometimes seen as early as two or three years. One eye is usually attacked and the other follows shortly afterwards, a few weeks, rarely a year or two. Clouds of opacity of varying density appear in the cornea, and gradually coalesce, until the whole is like ground glass. The episcleral vessels are injected and a vascular fringe may invade the cornea, forming the so-called salmon patch. Although the sight may be temporarily lost, the usual tendency is to recovery and complete clearing of the cornea. Fournier denied that all cases are syphilitic, but thinks some are due to malnutrition. Iritis is not an uncommon complication.

Disseminated choroiditis may be present in late congenital syphilis; taken together with the other symptoms, it aids in establishing a diagnosis; if found alone, it is of doubtful value.

Labyrinthian, or Central Deafness. Deafness develops during the period of childhood, at the time of puberty, even later. It usually begins with the occurrence of noises. These are usually very annoy-

ing. Sometimes, too, attacks of vertigo occur. At this period, the child complains of hearing poorly with one ear. This condition increases in severity more and more until in the course of two or three months the child is totally deaf in one ear. After a shorter or longer period, the same state of affairs occurs in the other ear, with the same ultimate results. In these cases the middle ear remains intact, and the evidence is in favor of the fact that the lesion is a central one. The deafness is complete, and does not improve under specific treatment.

In addition to what has been said, it may be added that an otitis media purulenta sometimes occurs. According to Fournier, middle ear disease which is due to syphilis is ushered in without any pain. This is no more true of syphilis, however, than it is of tuberculosis.

Fournier reports the following typical case in which Hutchinson's triad of symptoms were well marked. I cite it in detail:

M. X., aged 30, consulted Fournier on account of some lesions on the penis of three weeks' standing. He was astonished at their appearance. On examining the lesions, F. saw at once that they were gummatous ulcerations. The patient denied absolutely having had any venereal disease whatever. Fournier then examined his body, and began to suspect hereditary syphilis, on account of—after long and patient investigation—discovering the three following signs: (1) *Deafness, bilateral.* The patient was hard of hearing, and had been so since childhood, yet he thought there had been no discharge from the ears. Dr. Hermet examined his ears and reported as follows: On the right a watch is only heard at four inches. On this side the tympanum is deformed, thickened with fibrous bands over its surface. There were no perforations, but lineal perforations had evidently been present at some previous time and cicatrized. Ossicles apparently semi-ankylosed; on the left a watch can be heard only in contact. There is a perforation of the tympanum at the handle of the malleus.

(2) *Keralitis.* About the age of fourteen, the patient had double keratitis. This was severe and persistent. There was nearly complete blindness for several months. At present there are no appreciable traces left.

(3) *Bone and Skin Lesions.* In childhood one knee was severely affected, as shown by marked deformity, with cicatrized bands, slight shortening of the limb, limited movement and pronounced limping. The neighboring skin was the seat of numerous cicatrices, some small, others large, evidently the sequelæ of peri-articular abscesses or cutaneous ulcerations, probably of specific origin.

The next day his family physician who had treated him from infancy, wrote Fournier that the mother, while pregnant, had been infected with syphilis by the father, and that the patient had various syphilitic phenomena soon after birth. When two years old his left knee had a chronic inflammation, which had only been cured after a long course of potassium iodide. Finally, his wet nurse became infected.

Testicles. The following changes are observed in the testicles: (a) Sclerotic atrophy following infantile sarcocele; smallness (pigeon's egg, hazel-nut); hardness, fibroid, board-like, cartilaginous; modifications in form; irregularities, nodosities, tuberosities. (b) Infantile testicle; testes not deformed, not hard, small rudimentary.

The Kidneys. Recent researches, particularly the studies of Hecker, would seem to indicate that nephritis occurs more commonly in the late congenital syphilis than had been previously supposed.

The Liver and Spleen. Chronic enlargement of these organs has been repeatedly observed. It begins without pain and without disturbance of function. The patients with these lesions present a cachetic appearance, and this cachexia is usually associated with symptoms occurring in late hereditary syphilis. The enlarged organs are usually hard to the touch. In the liver, nodules of various sizes or ridges may be felt on palpation. Those changes are usually observed in older children, seldom before the fifth year, usually most often at the age of puberty.

The condition may continue unchanged for years, or it may lead to ascites and icterus, and in this way terminate fatally.

Nervous System. Cases of organic disease of the nervous system in late hereditary syphilis are multiplying in the literature. Persistent headache, with nocturnal exacerbations, have been described by Fournier. Cases of meningitis and endarteritis, as well as infantile tabes and progressive paralysis are being observed and reported with increasing frequency.

Cerebral gummata are exceedingly uncommon. Of 299 cases of cerebral tumors under nineteen years of age, collected by M. A. Starr, there was but one case, and that in a youth of eighteen.

Epilepsy and idiocy as manifestations of late congenital syphilis have been described, but there is great difference of opinion about this point. There are, however, a few well authenticated cases of epilepsy and idiocy resulting from late hereditary syphilis.

Many of the pronounced cases present a condition of infantilism. Those who are in their twentieth or twenty-fifth year make the impression of children who are ten or twelve. They are dwarfish, the bones and muscles are poorly developed. The genitalia are small and undeveloped, and there is absence of pubic hair. Puberty occurs late; menstruation and growth of the breasts is delayed; the uterus and its appendages are small.

Anemia is usually present, and the skin has a sallow appearance.

Mental deficiency, more or less marked, is present in most of the cases.

THE PRACTICE OF OBSTETRICS.*

BY E. F. FISH, M. D.,
MILWAUKEE.

Perhaps most of you who have seen the title of this paper on the programme have imagined that it was the intention of the writer to compile and present a text-book. While we are willing to admit that there seems to be a crying need for more text-books on the subject of obstetrics, gynecology, surgery, and general medicine, we now at the very beginning disclaim any such design, nor will we attempt to be erudite, profound, verbose or dry. We merely want to direct your attention to this branch of medicine for the purpose of reminding you of the fact that it is a living and active department, which is altogether too little taken into consideration by the profession, and, besides, we would like to have you tell us why this is so.

For many years this branch of medicine has seemingly been relegated to the midwives and young practitioners in medicine; the older men fight shy of it, they do not seem to want it. The reason for this appears to me to be plain. It is principally because the compensation is not commensurate with the amount of work involved. It has been said that we are in the business for the love of humanity, because we are philanthropists, and that pecuniary remuneration must be a secondary consideration. All this sounds well and reads well, but I, for one, do not take any stock in this Miss Nancey kind of prattle, and do not hesitate to claim that we are in the business to help suffering humanity 'tis true, and to make money at the same time, if we can. Even the gentlemen of the cloth, the expounders of the gospel, do not object to a liberal salary; take away the compensation and the enthusiasm cools off. Let an offer of a larger salary come from another quarter and immediately there is a divine calling in that direction. We are all looking for work and respectable pay for what we do. I claim, therefore, it is the poor, insignificant pay usually accorded obstetric work which drives away experienced men and gives the midwives plenty to do and incidentally feeds the gynecologist. The public believes that ten dollars is enough for any doctor and does not hesitate to say, "if that is not enough for you we will get Frau Schmutzigkeit, who will not only attend my wife at the time of confinement, but will come in addition for ten days and wash the baby, as well as infect

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 4, 1903.

the mother." Yes, I agree with the writer who says that the midwife is responsible for more suffering than the bubonic plague or the Asiatic cholera; that she seldom knows anything of anatomy, the repair of lacerations, or the practice of asepsis. Carl Braun, of Vienna, once said to the class of which I was a member, "Die Hebamme ist der natürliche Feind des Arztes." (The midwife is the natural enemy of the doctor), and he is right. The question naturally arises, how are we to remedy this prevailing evil? In the first place, I believe in raising gradually the standard of medical education. This will tend to discourage men who look upon the practice of medicine as a sinecure and a snap, men who by hard knocks have saved a couple of hundred dollars while plying their trade, men who look upon fifteen dollars a week as a doctor better than fourteen as a mechanic, and who have no other qualifications to present to the college they want to enter; men who have sons long on illiteracy and short on intelligence; it will invite the brainy young man and offer him some inducement to join our ranks. To confine our remarks to the subject of obstetrics, I will say that our colleges must give their students not only a theoretical, but a practical education in this line of work; these young men must be taught how to make a diagnosis and to apply this knowledge. It is not enough to simply be able to tell that there is a vertex presentation. They must at least be able to tell whether there is an occipito-anterior or occipito-posterior presentation. They must be taught to recognize the unusual presentations and conditions and the common cases will take care of themselves. I once called on a physician and surgeon, one of the very best known in his city and state, and while discussing this subject I told him that in my time I had attended over one thousand cases of obstetrics and was often unable to tell just what condition I had to deal with. "That's nothing," said he, "I have attended over twenty-two hundred cases and never attempted a diagnosis farther than to find out whether I had a head or breech presentation." It is no uncommon thing to meet men who attend from seventy-five to one hundred and fifty confinements annually. It is no uncommon thing for such men to disregard the position of the child further than to ascertain whether there is a vertex or breech presentation. Labor begins and the cervix dilates, the birth is slow and the instruments are adjusted. The doctor cannot wait, and often in his haste forgets the mechanism of labor and spends his entire strength against the pubic bone. He forgets for the time being the pelvic axis and often fails to try to protect the perineum. It is not because he does not know these things, but because he is crowded for time, and the result is injury to the soft parts

and often complete destruction to the perineum. These men illustrate the busy obstetricians in the profession; men who maintain a large practice in this line by reason of cheap work, and who, as a consequence, are worn out and exhausted and unable to give proper time and attention to the patients. I again repeat that the way to correct this existing evil is to raise the standard of education, thus inducing better men to enter the profession. Urge the practitioner to take fewer cases and demand better pay. The laity should be taught to engage their physician, weeks and even months in advance. The physician should call on his patient, make her acquaintance, ascertain the condition of the pelvis, and by external manipulation learn the position of the child. The prospective mother ought to be carefully examined, her digestion given all necessary consideration, her bowels regulated and the urine analyzed. It is so common for the doctor to say, "when the pains come every ten minutes let me know." This is all wrong on our part, for often we know nothing whatever of the physical condition of our patient until we are summoned to a fully developed puerperal eclampsia. We must not fail, therefore, to look into our patient's physical condition and hygienic surroundings. The public likes proper treatment; the man who brings a large Kelly pad and rubber gloves, who has an immaculate white, sterile apron, whose linen is unsoiled, who scrubs his hands and arms and properly prepares his patient for delivery, is appreciated not only by the laboring mother, but by the friends and relatives who may be present, and such a man can exact a reasonable fee.

I want now to enlarge somewhat on this subject and consider first the preparation of the patient. In my opinion this part of the work is usually neglected altogether, and again too radically enforced. The bowels should be emptied by common soap suds enema, the bladder should be catheterized, and the external parts, from the umbilicus to the knees, scrubbed and cleansed with green soap and sterile water. The vulva should be thoroughly prepared, but not shaved. I do not believe that shaving is necessary. I admit that it is good practice and proper if the patient does not object, but, on the other hand, the parts can be rendered sterile by washing with soap and water, followed by a bichloride wash 1 to 4,000, or 2½ per cent. carbolic acid or lysol or creolin solution, or any other antiseptic, and this again followed by sterile water. Finally, a sterile gauze or cotton pad should be placed over the vulva, and labor may proceed.

Douches. Do not give douches at this time unless there is some decided indication, such as gonorrhea. If disinfection of the vagina is indicated it is far better to scrub it with a gauze sponge, and green

soapsuds, followed by a 2 per cent. lysol solution, and this again followed by sterile water. It has been pretty thoroughly established that there are no pathogenic germs in the vagina. They are confined to the vulva and external parts. The vaginal secretion is usually sufficiently germicidal to sterilize it, therefore, I should say cleanse and sterilize the external parts and do not douche or pay any attention to the vagina unless there is a suspicious discharge, when one should resort to washing and scrubbing as just decribed.

Rubber Gloves. Rubber gloves, in my opinion, have come to stay, at least in obstetric work. If they are of any utility at all it is in this line of work. They protect the physician as well as the mother, are easy to sterilize and keep clean, and do not interfere with the obstetrician in his work. They should be considered a part of every physician's armamentarium. The same can be said of a large surgical rubber pad. It protects the bed and the mother and lessens the postpartum work.

Examinations. A great many, in fact, nearly all works and writers on the practice of obstetrics, warn us against frequent examinations. I do not agree with those who take exception to such procedure. If the patient is properly prepared and the doctor as well, I cannot understand how one or any number of examinations will harm the patient. I am often able to assist in sliding the os uteri over the head and thus relieve the patient and facilitate the birth. There is absolutely no danger of carrying infection to the uterus if we have sterilized the external parts. I know that I can often save the mother great suffering without in the least increasing the liability to infection or laceration.

Instruments. I consider the obstetrical forceps a *sine qua non* in selected cases of childbirth. There are many makes on the market and nearly all are good. Used judiciously they often save the mother much pain and distress. There is no reason why the patient should be torn by them if the one who is handling them understands the pelvic diameters and axis traction, as well as how to protect the soft parts when the instruments are not used. It is hardly necessary to say that they must be sterilized and the patient prepared.

Lacerations. Shall I say that lacerations of the soft parts must be repaired at once? To neglect this duty is almost criminal. I am not in favor of repairing cervix lacerations immediately after childbirth. Unless infection is carried into the vagina they heal fully as well as if an attempt to repair has been made. To repair a lacerated cervix immediately after birth and to do it well, requires extraordinary skill. This cannot be expected of the general practitioner and is un-

necessary. A tear extending into the circular artery or deep into the vagina must be closed lest the patient bleed to death. The repair of the perineum and soft parts is, however, imperative, and the results in my practice are far more satisfactory than when the repair is made weeks, months and years after. Finally, the patient is thoroughly cleansed with sterile water, the bed linen changed, as well as the patient's gowns, a sterile cotton or gauze pad placed over the vulva and changed once in four hours, the vulva being bathed each time with some antiseptic solution like lysol. This system of after care should be enforced in all cases. The mother should be given a rest of six or eight hours, after which the baby can be put to the breast once in four hours and given plain warm sterile water in teaspoonful doses between times until the flow of milk is established.

Sepsis. Notwithstanding our best efforts, we do have sepsis. We have it in our own practice and we have it in the practice of others. I am speaking now of sepsis after labor at term, and not of sapremia due to decomposing after-birth. We will term it puerperal sepsis. These are the cases which do not call for the use of the curette, especially the sharp curette. We must here have a distinct conception in our mind of what constitutes sapremia, septic intoxication, and pyemia. The first is generally due to retained placental tissue undergoing putrefaction by reason of the presence of the saprophytes. This is the simplest form of sepsis. Remove the decomposing mass, the absorption ends and the patient recovers. The second form is toxinemia caused by the poisonous albumen produced by bacterial action on the living tissue. The third form is pyemia, or blood poison of microbic origin. It is due to the streptococcus or staphylococcus, or even the gonococcus if present in the blood. It is generally characterized by metastatic abscesses, although these are not absolutely necessarily present. It is sometimes called bacteriemia, because the bacteria are in the blood, a condition which must obtain in order to have a pyemia. In the treatment of sepsis I have had no success with antistreptococcic preparations, although my experience with it has been limited. The serum treatment does not seem to have a large following. I believe it has been given a fair trial, but has as yet failed to convince the profession of its effectiveness because the streptococcus has not produced a known specific toxin and hence no specific antitoxin can be prepared. Of those in use Marmorek's antistreptococcus serum seems to be the best. We sincerely believe that future experimentation will secure for the anti-toxin treatment its proper place in the therapy of puerperal sepsis. Unguentum Credé is having its day, too. Some reports seem very flattering. In the present state of our

knowledge it even apparently supercedes antistreptococcus preparations.

Hysterectomy. I do not believe in hysterectomy, because it is so difficult to select proper cases. Some reports of this line of treatment show a recovery of 50 per cent., but again it is claimed that many of these would have recovered without the operation. If one can find a case in which the source of sepsis is confined to the uterus, the tubes and ovaries being sound and the soft parts undamaged, hysterectomy may be justifiable. No instances, however, of recovery following hysterectomy for puerperal sepsis are recorded where there was at the time a general profuse peritonitis. I have great faith in the treatment as given by Wetherill, of Denver, Colo. I take the following from one of his reports:

"The vulva and vagina are gently, but thoroughly cleansed with soap, water, alcohol and a 2 per cent. carbolic solution. The vagina is mopped out and dried, and a Sims speculum introduced. The cervix is grasped with a volcellum forceps and gently drawn down and steadied, the cervical canal is wiped out with gauze and any loose bits of membrane, or fetal residue picked out with the forceps. The uterine cavity must be gently irrigated with salt solution, or even wiped out with pure carbolic acid if the surfaces be covered with diphtheritic or streptococcic membrane, and then gently dried with a strip of gauze. A double current drainage tube, of as large a caliber as can be easily introduced, is placed to the uterine fundus and some 50 per cent. alcohol is thrown through each tube with a glass syringe to assure freedom from obstruction. The vagina is lightly packed with gauze and the patient returned to bed. The nurse is instructed to inject into the tubes at short intervals from 2 to 4 ounces of 50 per cent. alcohol, which at once flushes and cleanses the uterine cavity and retards septic diffusion through the lymphatic vessels along which it is passed in the process of being absorbed. Thus, not only the original seat of the infection in the uterus and vagina may be drained and disinfected, but the very absorbents themselves may be saturated with a nontoxic antiseptic, the constitutional effect of which is precisely indicated, for the more it is diffused and taken up the better will be the effect. The tube and gauze may be left in situ from three days to two weeks, being kept from obstruction by debris, by the strong action of a good piston syringe. In addition to this local treatment, constitutional treatment is indicated, consisting of strychnine, quinine, whiskey, and other heart stimulants, and physiological salt solution by hypodermoclysis, or its introduction into the system per rectum or intra-venously. In case of nausea or vomiting the patient should be sustained by rectal alimentation and repeated lavage of the stomach until this symptom ceases."

Formaldehyde. The experiments of Barrows and others fail to furnish any favorable reports in the treatment of sepsis by the intravenous injection of formaldehyde. It is used in the strength of one

to five thousand, and of this about a pint, or five hundred c.c. is used at one time. Dorsett says he has no confidence in it. He has made scientific experimentations on rabbits. Cultures showing the presence of streptococcus pyogenes were inoculated in rabbits and all died within twenty-four hours, notwithstanding some were treated with formalin and others with physiological salt solution. We do not believe that formaldehyde, by any method so far tried, has any specific action in the treatment of puerperal sepsis. It is extremely doubtful whether any antiseptic solution given by intra-venous injection will counteract the toxin. The general opinion seems to be that any fluid which will destroy the streptococcus will also disintegrate the blood.

Discussion.

DR. J. T. SCOLLARD, Milwaukee.—There are only a few points in connection with this paper that I wish to call particular attention to, because I think that there are some phases in the practice of obstetrics that have in the past been subjects of considerable abuse.

We have all heard and read many times that labor, with the advance of civilization, has become a semi-pathologic process; that, owing to artificial modes of life and the enervating influences to which she is subjected, civilized woman is less fitted to bear children in the same natural manner as her less civilized or savage ancestors. I believe that, instead of this being true, the reverse is the case. If it were true, then the dystocia must be due to the lessened capacity of the bony pelvic canal, or to some one or more of the various pelvic deformities which are met with. Then we should find in the United States, among native American women, who are subject to a greater degree than any women in the world, to the degenerating influences of the highest civilization, a greater number with deformed pelves. The reverse proves to be true; statistics show that but 2 per cent. of native American women have deformed pelves, while 6 per cent. of foreign born and reared women have deformed pelves, and consequently suffer more disasters in labor. Hence I maintain that the process of labor is becoming less pathologic as civilization advances, and therefore should be conducted more in a natural and less in an artificial manner than heretofore; there should be less meddlesome interference with the natural forces in the vast majority of labors. But when assistance or operation is needed it should be a procedure of election with more clearly defined indications, and then the results will be more beneficent than in times past. In the average case of normal parturition the chief duty of the obstetrician is to be prepared to meet every emergency; to see that everything is normal or prepare to correct deviations from the normal, to have the field cleared so that if interference is necessary, he may be able to act in a correct and aseptic manner, at the proper time.

It has been proven by bacteriologic research, that in one-half of all obstetric cases examined, when the utmost precautions are taken as to asepsis, pathogenic germs of one kind or another will be introduced. Hence morbidity varying from the mildest type in which fever is present for perhaps one day, to the most severe cases of so-called puerperal fever, will occur in about 50 per cent. of all cases. The mild cases cause little anxiety, but there are still enough severe ones to cause a mortality of from 5 to 7 per cent. throughout

the land, of women in the prime of life. The prophylaxis and treatment of puerperal infection are, therefore, the most important questions connected with the practice of obstetrics to-day. The prophylaxis of infection in obstetrics is hampered by several unfortunate conditions: 1. A large number of obstetric cases are attended by incompetent midwives with little training, and but slight appreciation of the dangers of infection or the means necessary to avoid it. 2. With a considerable part of the medical profession and the great majority of the laity the aseptic management of labor is not seriously regarded or considered necessary. It is so often observed that cases in the worst surroundings and with no care get along well, that doubt is raised as to the need of all the trouble required to manage labor aseptically. They forget that in such cases the good results are due to the fact that the antiseptic forces and aseptic conditions of nature have not been interfered with. This leads to the third unfortunate condition which obtains among not a few, *viz.*, too frequent internal examinations, as well as too early and unnecessary operative interference without proper preparation or adequate precautions to preserve the normal aseptic condition of the normal parturient woman. The essayist has said he would make as many examinations as necessary to arrive at a diagnosis and assist the woman. *How many are necessary?* We should have some ideal to work up to; our ideal in this case should be *as few examinations as possible; no internal examinations in many cases.* First, because it is unnecessary. Second, because it leads to infection of the genital tract, with serious and fatal results in many cases. It has been proven in actual practice that labors can be successfully managed without internal examination. I have attended a number of cases in this way. The presentation, the position and even the progress of the labor can be made out by external examination alone; 62.5 per cent. of labors are in multiparous women; their history easily obtained will show that they have been and can be delivered; external examination and measurement will confirm this, hence not more than one internal examination is needed in the normal multipara; of 37.5 per cent. of labors which are primiparous the great majority will be found at term having the fetal head down in the true pelvis; this can be determined by external palpation, and taken in conjunction with the external dimensions of the pelvis will show that delivery can take place. Hence the necessity for many or frequent examinations is largely eliminated in the normal primipara. This leaves but a small percentage of all labor cases presenting abnormal conditions requiring repeated internal examinations. If this ideal were generally sought to be attained in obstetric practice, I believe that a great deal of the present morbidity, if not mortality, could be avoided in this branch of medical practice.

Since complete prophylaxis is still unattainable, the treatment of puerperal infection is of great interest and importance. Every case of elevation of temperature in the puerperium is to be regarded as due to infection until this is excluded by careful investigation. If the points of entrance of the infection are found in the vulva, vagina or cervix, direct applications as of nitrate of silver or carbolic acid, should be made to the well exposed points of necrosed tissue, which will hasten separation and limit the amount of absorption of toxins.

When the infection has been introduced or has passed into the uterus, two classes of infective disease are to be distinguished clinically: one a true

infection where the germs, streptococcus, staphylococcus or mixed infection of parasitic germs have entered the tissues, and become widely distributed in the blood and distant parts, and the other caused by saprophytic germs which develop in dead or dying material. This may be a distinction without a difference, as supposed saprophytes have been found in the uterine tissue, while the streptococcus and staphylococcus have been found in mild cases with transient fever. In the saprophytic intoxication it is simply necessary to remove the debris in which the germs live to effect a cure. This is best done with the aseptic finger, which can be easily introduced to explore the uterine cavity, and clear out all retained material without danger of injury to the uterine walls. This procedure establishes free drainage, and with irrigation with normal salt solution, the foul odor of sapremic disease and all other symptoms disappear. The curette is dangerous and unnecessary in these cases.

Tamponade of the uterus is not indicated as the tampon is not a drain, and drainage is better secured with a free uterine cavity and cervical canal. In case of true infection of the uterine tissues thorough irrigation of the entire genital tract, including the uterine cavity, should be done with normal salt solution. If after this thorough cleansing the fever does not abate, and there is no retained material, then we have a true infection extending beyond the endometrium, beyond the uterine walls, pain and tenderness indicating peritonitis, and sometimes the more profound intoxication a bacteriemia. In such cases local treatment is in vain, as it cannot reach the infecting germs, which are distributed in the blood and various organs of the body.

Supporting treatment as described by Dr. Fish, careful nutrition and avoidance of all waste of energy, must be borne in mind. The adoption of measures to combat the general sepsis is here most important. 1. The reports of antistreptococcus serum are unsatisfactory at least. 2. The silver preparations of Credé have given excellent results. I have treated seven severe cases of infection with Credé's Silver Ointment successfully. 3. The use of normal salt solution by enteroclysis, by hypodermoclysis or intravenous injection has given good results, by diluting the poison and washing the blood of the accumulated toxins which are eliminated by the kidneys; free diuresis is established by the saline infusion. I believe this treatment will accomplish all that can be done by any other method without any possible danger.

DR. W. B. HILL, Milwaukee.—Although the subject presents nothing new nor startling, it is one that is always interesting to the practitioner, and it has been given to us in the most interesting manner this morning, both by the essayist and Dr. Scollard.

I would like to take issue, however, with the essayist in regard to the statement that we try to shirk our obstetrical cases, for I do not think it is true. The doctor shirks those cases only when he is tired out and does not like to respond to the night bell, the same as he would shirk a diphtheria case or any other case when he was weary from overwork; but the average practitioner knows that the practice of obstetrics is the foundation of his subsequent practice, and he, therefore, clings to it. It is only in the larger cities, amongst those people who have begun to specialize and have not cut loose from their old support. general practice, that they wish to get rid of this kind of practice, because it interferes with their surgical or hospital occupation.

I do not think that the raising of the fees would in general overcome this difficulty at all. I do not think it would deprive the midwives of a single case—in fact, the reason the essayist gave for the midwives getting so many cases, was that they offered to do the whole thing for $10; and he might have said $5 or $3, as some of them do; but if one who could not take care of these cases, would insist on their going to a hospital and getting proper care and being delivered under proper environments, the difficulty would be obviated, and if that were not feasible I would suggest that some one in the community make a specialty of obstetrics and have these men turn the cases over to him, and he would cut loose then from contagious and suppurative diseases and take care of such patients, and be always ready.

Of course, the disagreeable thing about the practice of obstetrics is, first, that we want to be retained early, so that we may give good counsel to the patient, and good treatment previous to the confinement; and that, of course, means that if we have a long waiting list we are absolutely tied down day and night, Sunday and Fourth of July, to our work, and we cannot even go to the meetings of a medical society. I believe that, in justice to the doctor, when he is retained by a patient to look after her in this capacity, he ought to have a retainer the same as our brother practitioner, the lawyer; and then after having kept the doctor in suspense all these weeks waiting for the event to come off, if they decide at the last moment to have a midwife and relieve the doctor, he will at least have some compensation for his trouble.

In regard to the care of the patient during confinement, I think that perhaps all has been said that is necessary, and yet there seems to be an issue between Dr. Scollard and Dr. Fish in regard to internal examination, and I would like to say that I believe under proper precautions, internal examinations are admissible. I believe that it is the only way that you can make very careful diagnoses in the case, and I think it is quite essential. I have repeatedly gone to cases of confinement and from all external appearances (I will agree that I am not as expert in these matters as Dr. Scollard) have thought that the labor was progressing and that we were really in the second stage of labor, and after waiting a long time made a vaginal examination and found that the cervix had not begun to dilate at all. Therefore, as a matter of determining the exact condition of affairs, I think that we ought to make vaginal examinations. If these are made before the rupture of the bag of waters and are made to determine the condition of the os, which is one of the important matters I believe, I do not think that septic material will be carried up at all.

In regard to the fact that in some cases we do not have sepsis, although no precautions of an aseptic nature are used, yet I would call attention to the fact that there is an acquired immunity among patients who live in the dirt. Their resistance is not weakened by good hygiene, and they are kept in a state of warfare all the time, and as a consequence they have acquired an immunity against infection, and that is the reason that in these hovels we seldom have infection, whereas in the very best families, in the finest homes, and under the strictest precautions, we sometimes find that the patient succumbs so readily to infection that we think there is a sort of fatality—among the clean, I was going to say.

As to the treatment of sepsis: I agree with the essayist entirely in regard to the drainage. I think that the drainage, whether it be the method that he suggests, or the ordinary method of packing the uterus and keeping up

good drainage, is the essential treatment in ordinary cases. I believe there are three kinds of septic infection from the streptococcus: 1. Where we have the absorption of the toxins. 2. Where we have the live bacteria floating in the blood and setting up infection everywhere, and 3, where we have the agglutinated bodies of the streptococci that have multiplied in the blood and been killed, the pyemic form of sepsis.

In the first form of infection, that is, of toxinemia from the streptococcus I am firmly convinced that the antistreptococcus serum will do good. I recall one case particularly where I was sure that the patient was infected with pure cultures of streptococcus from erysipelas, and we had typical symptoms of the streptococcus infection which gave way immediately and beautifully to treatment by the antistreptococcic serum; since that time I have recommended it to many others and have seen others in consultation, and in every instance where we have this particular form of infection, the antistreptococcic serum seemed to do the work.

DR. P. J. NOEB, Menominee, Mich.—I have enjoyed this discussion exceedingly, and merely want to emphasize one point which seems to have been left somewhat out of consideration. Both the essayist and one at least of the gentlemen who discussed the paper, considered the situation from an ideal rather than from a practical standpoint. I have no exceptions to take regarding the preparation that should be made in obstetrical cases, and the emphasis placed upon the extreme importance of securing aseptic conditions; but the fact remains that it is absolutely impossible to get the conditions which the essayist has outlined for us, in a large majority of obstetrical cases. I had hoped the essayist would tell us more specifically what we shall do with those people. It reminds me of an experience that I had when I first began to practice medicine. I was called in to a family without any previous notice and found the patient between two feather beds, that from the appearance I should judge had been brought over by her great grandmother, from Poland. It was impossible to get even clean water. The next day I asked an older practitioner what he did with that kind of cases. "Well, I will tell you, doctor, I tell them to do as they d——d please, and they get along all right." The remarkable truth of that statement has been a constant surprise to me ever since. It has been suggested that puerperal sepsis occurs, not alone in the hovels, but also very frequently in homes where exceptionally favorable circumstances prevail. I recall that only a few years ago the wife of a distinguished professor of obstetrics, not many hundred miles from here, died from puerperal sepsis. Considering the great number of confinements that are made in the homes of the ordinary working people under unfavorable conditions, it is exceedingly rare that you have cases of puerperal septicemia, and it is astonishing how well we get along. But because we do have good results in these cases, the obstetrician should not on that account fail to make the utmost endeavor to keep himself perfectly clean, to keep his hands clean, and that is really the essential factor. He should see to it that he obtains sterile water. He may not be able to get clean water, but he will get water that it is possible for him to boil, and should see that it is boiled. He will have to supervise that detail, because if he does not he will find that attendants will take their boiled water and go to their well, or whatever place they have, and get cold water with which to cool off their sterile water, and, unless restrained, they will then dip their unwashed fingers into it to test its temperature.

DR. THIENHAUS, Milwaukee.—In regard to the question of Dr. Noer, I would like to say, that when you come to a country place where you find the surroundings dirty and the water so filthy that even when it is boiled you cannot make use of it, the best chemical fluid for the disinfection of your hands and instruments is alcohol, 70 per cent. or 90 per cent. Every practitioner, who has to deal with country practice, ought to have a bottle of alcohol with him for cases of emergency, for operations and the conduction of childbirth; and if you rub your hands for five to ten minutes thoroughly in alcohol, you can do your obstetrical and operative work with relative safety and without fear of infecting your patients from the bacteria on your hands.

Another precaution that ought always be taken by the practitioner, is, that when he has to touch *septic* cases he should protect his hands from the material by the use of India rubber gloves, thereby keeping his hands in what one calls a relatively aseptic state.

DR. C. C. GRATIOT, Shullsburg.—I wish to raise one word of caution, and that is regarding the Kelly pad. If you do not know who is taking care of the Kelly pad, throw it away.

I have had experience with the use of antistreptococcus serum in sixteen cases, and it has proven favorable every time; in one of those cases Professor Webster, of Rush Medical College, was called in consultation. It won't hurt your patient and you should give it a trial.

DR. J. C. CUTLER, Verona.—In regard to the care of the Kelly pad, see to it yourself; but what will you do in precipitate labors, where you are four or five miles from your patient and have no telephone. Just before coming up here I was called to a case with as great speed as possible, and yet the child was born at least half an hour before I got there. There the woman was lying in a pool of blood, as you might say, and had been there for a half hour, with the cord unattended to. In those cases I think it best to do very little examining. I ligated the cord and took care of the child as best I could. But even here, with no care and no preparation whatever, the woman is coming out in pretty good shape. I have had cases of all kinds, from the dirtiest to the cleanest, and in four years of country practice I have had trouble with only one woman, and that was a case where I should have had a retainer, as suggested by Dr. Hill. I had been engaged at the last moment. The mother took care of the case, and four or five days later the milk dried up and I was called in. The woman made a thorough recovery, although I had to use special means to remove the secundines. I consider white duck pantaloons and coat better than an apron. I find that it is almost necessary where you are driving through the country a great deal. I carry them in my grip and slip them on before going into the room. I examine as little as possible, but as much as is necessary, to the best of my judgment.

The fees in the country are not to be compared with those here. I went into a large territory where my colleague was charging $5, and the rate throughout the country was from $5 to $7, and I immediately set a price of $10, and from that I have gone up to $20, according to the time spent, and there evidently is no dissatisfaction coming, for I am getting my share of the work.

DR. B. F. DODSON, Berlin.—Not wishing to take up much of the valuable time of the society in this important discussion, I will state briefly that in June, 1902, I was hurriedly called to attend Mrs. C., a Polish woman, in con-

finement; she lived close by, and I promptly answered the call, but found upon my arrival that the woman had just died. She had been attended by an old woman who for the last thirty or forty years had occupied the place of a midwife among the Polish people, but never having received an hour's instruction and having no knowledge of the mechanism of labor, she was helpless to relieve abnormal conditions. In this case I recognized an unnecessary loss of life, and so reported to our mayor, who ordered an inquest. The post mortem, which was conducted by three physicians, was held immediately, and it was found that death resulted from post-partum hemorrhage. No effort had been made to remove a slightly attached placenta. No stimulants, no hemostatics of any kind had been used to save the woman—not even lowering the head. Of course, the verdict of the jury was in accordance with these facts. The fright that the midwife underwent in being called for examination before a jury of this character, has prevented her from answering obstetrical calls to quite a degree. The blame for this death was placed where it belonged—on this woman—which we too often fail to do, and very frequently it falls back on the physician who takes charge of a case at a late hour. The law requires us to give cause of death; why not ask for investigation in all these fatal cases which have been in the hands of the unqualified midwife? Is it not the duty of every Health Board to search out these unnecessary deaths, for they take place more or less frequently in every community in course of time, and why should the physician who has spent years in preparing himself to be helpful in this line of work, refrain from enlightening the people in his community regarding such unnecessary sacrifice of life whenever it does occur?

EDWARD EVANS, La Crosse.—We cannot make frequent examinations safely because we are not working under ideal conditions, and I believe we do not sterilize the perineum and vulva in common practice, and, therefore, we run the chance of infection of the patient. I believe in making examinations as frequently as is necessary to make a proper diagnosis, and that ordinarily should be *once*. External palpation and one thorough internal examination is all that is necessary, until something calls for further interference. I object to continual examination to see how soon the bag of waters is going to rupture, or how soon the cervix is going up over the head.. Those are evils constantly seen and we must avoid them and can only do it by avoiding examination, because we are not working under ideal conditions. I believe the vulva is practically never sterilized. I believe you will get more tears in applying the forceps than you will without, except in cases where they should be applied to prevent stasis in the tissue, and, of course, you ordinarily get a tear from the pressure of edema. The forceps are very much abused, especially in this country, where the American women object so much to enduring pain, and the American doctor objects so much to waiting around.

I think sepsis can be divided into two classes: first, where we are getting slow absorption from a septic focus, and second—true sepsis, where whatever you do the patient is going to die. You should proceed at once in the first class to thoroughly sterilize your surgical tract. If you have an infected wound you cleanse it thoroughly and prevent probable pus absorption; and that is proper in any patient who has sepsis. Begin at the vulva, antisepticize, and then proceed upward through the vagina into the uterus and then with a drain leave the parturient canal in a practically aseptic condi-

tion. I believe one of the best means of sterilizing the tract is to use peroxide of hydrogen, not for its antiseptic qualities, but for its mechanical cleansing powers. You can very thoroughly cleanse the vagina and uterine canal with peroxide.

DR. FISH (closing): One of the speakers said that a hospital was the ideal place in which to have a woman about to be confined. I believe that is true if it is in an obstetrical hospital; but in a general hospital where we have everything, from small pox to large pox, and scarlet fever, erysipelas and all the different diseases, it is not the ideal place to have a woman, especially if she has five or six nurses who are attending different cases, and who run in and out of the patient's room. That patient can be handled just as well and better at home with a trained nurse, as in a hospital, where all kinds of diseases are brought.

As for patients who live in hovels, and feather-bed patients not being infected, very often it is because these infections are due to the gonococcus, and you do not find the gonococcus in that kind of patients. Gonorrhea is an aristocratic disease, so is stricture and double epididymitis; it is not a disease of hovels or feather beds; and for that reason you do not get puerperal sepsis. A great deal of this sepsis is due to gonorrhea. A young man nowadays who has not had a stricture, or has not one at the present time, is a little bit antiquated.

As for the precipitate labor, I have many patients who have babies every year, never menstruating all the year round, and the baby always comes before I get to the house. You can only go to the house in such a case, take away the afterbirth and charge your regular fee. But I was talking of places where you have time to prepare.

You do not have to stick your finger through the perineum in making a digital examination. You open the vulva and pass your fingers into the vagina; you do not have to perforate the perineum and carry the germs into the vagina, or from the rectum into the vagina.

SEPTAL DEFLECTIONS. THEIR CONSEQUENCE AND TREATMENT.

BY F. T. NYE, M. D.,
MILWAUKEE.

Septal deflections have been studied with minuteness of detail since the 17th Century, according to Burnett (Diseases of Nose and Throat, Vol. 2). Various rhinologists have since that date studied them perhaps more elaborately, owing to the added resources in the form of improved instruments as well as better control of light used for diagnostic purposes, also with the determination to improve, if possible, upon previous methods pursued for their correction. Therefore, much credit is due such scientific workers as Kyle, Gleason, Ash,

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 5th, 1903.

Mayer, Roberts, Douglass, Watson, Ingalls and others, who, by their untiring zeal, have added materially to the gratifying results produced by the careful performance of some well selected method or combination of methods that will always be suggested in each individual case. Owing to the obvious impossibility of describing in a short paper all the varied deflections with their modifications, I will simplify the subject as much as possible by the following classification:

1st, Simple deflection, partial or complete. 2nd, Deflections with excess. 3rd, Excess with only slight deflection or none whatever.

Deflections may involve either the bony or cartilaginous portion of the septum, or both. They may occur as ridges in horizontal, perpendicular or oblique positions, or all combinations of these angles.

ETIOLOGY: Deflections are caused in a large percentage of all cases by some congenital mal-position of the bones composing the floor of the nose. (Quain's Anatomy. Organs of Special Sense. Vol. 3, Part 3.)

In the front part of the floor of the nose is the incisor foramen, which in the recent state is generally closed. Sometimes, however, a narrow funnel-shaped tube of mucous membrane (nasopalatine canal) passes obliquely downwards from each nasal fossa for a short distance towards the front of the hard palate. Vesalius, Stenson and Santorini believed that these tubes of membrane generally opened into the roof of the mouth by small apertures close behind the central incisor teeth. Haller, Scarpa and Jacobson found the canals in man usually closed and often difficult of detection, and these statements have been confirmed by most modern investigators. The canal is a remnant of the wide communication between the nasal and buccal cavities found at an early period of fetal life, which in man is usually obliterated, at least in its lower part, before birth, although persistent in many animals. It is represented below by a solid column of epithelial cells, continuous with the epithelium of the palate, and above by a narrow center lined with ciliated epithelium opening into the nasal fossa, but closed below. The part of the inferior meatus which lies behind the incisor canal, together with the space immediately behind the posterior end of the superior and middle turbinals as far back as the orifice of the Eustachian tubes, belongs to the primitive buccal cavity of the fetus, having become separated from the permanent mouth by the growth of the palate.

This, then, is the key to the situation: any form of abnormal development, lack of development or any superfluous development of cartilage or bone will result in some change in the shape of the nasal floor. Any excess will produce elevation of the

floor and form an abnormal "dental" arch, which is controlled only by the degree of elevation. Thus we are able to observe how any tendency to elevation upwards of the nasal floor is sure to have its corresponding effect upon anything resting upon that floor. In addition to the added elevation, the resulting irritation in the majority of all cases causes an increase in cartilaginous or bony proliferation, which usually manifests itself locally in the triangular cartilage, or a change in direction as well as size of the crest of the palate process of the superior maxillary bone at its junction with its fellow of the opposite side. In this mal-position or deformity, which is very frequent, I think much more frequent than the majority of physicians fully realize, we have the most prolific source of septal deflections. Should any of these abnormalities occur or be present at birth, immediately thereafter—as respiration and the normal functions of the mouth begin—the whole tendency is for the elevation to increase rapidly with the growth of the child, if, from any disturbance of the mucous membrane of the nasal cavity, intumescence being the most frequent, interference with respiration occurs. Hypertrophy of the pharyngeal tonsil follows, resulting in the establishment of mouth breathing, and from its inception an entire change of method or function takes place in all the facial muscles of respiration as well as mastication, which produces a marked increase in the tendency to elevation of the superior dental arch.

Traumatism upon the face about the nose, or perhaps when more directly applied to the nose itself, is, in my opinion, the next in order of frequency as a prolific cause. Injuries of the nasal bones or in that region, having a downward force, will cause a bending of the cartilaginous portion or a splitting at the base of the septum which not only results in a permanent deviation, but a tendency for the deviation to increase the nutrition to the parts already plentifully nourished, and terminating in cartilaginous formation, as previously stated; or should the impact of the injury be received either at the junction of the triangular cartilage with the descending plate of the ethmoid or the vomer, separation is liable to occur, and this complicates the deviation. A third cause, although somewhat rare, occurring frequently enough to deserve mention, are tumors or new growths within the nose itself, where, through the process of undue pressure, a deviation results.

To be able to comprehend the far-reaching deleterious and damaging consequences of septal deflections, I will roughly classify them under three divisions which will answer the purpose of this paper, and avoid unnecessary detail.

First. Imperfect respiratory functions resulting either in phonatory or olfactory disturbances.

Second. Pharyngeal or laryngeal diseases.

Third. Imperfect drainage from any or all of the accessory sinuses that discharge their contents into the nasal passage.

To recapitulate, the changed air currents produced by any curving of the septum, inducing as it will some of the minor complications, is sure, sooner or later, to alter the voice or diminish the acuteness of the olfactory sense.

Pharyngeal irritation induces primarily hypertrophy of the pharyngeal tonsil. Especially is this true in childhood, even in children of only a few months of age up to and including early adult life. However, far more serious than this, as all are willing to admit at the present time, is the deleterious effect upon the development of the child of the so-called "Adenoid Tissue" at the vault of the pharynx.

The otitic complications are the most to be dreaded in their far-reaching and often dangerous results. Aside from the phonatory changes, laryngeal inflammations are remarkably frequent, and all too frequently terminating in either a tubercular deposit or round cell infiltration within the cavity of the larynx, with the dire consequences of which you are only too familiar.

The third and last, that of sinus drainage, interests rhinologists possibly more than other physicians, owing to the fact that they are usually better equipped for the study and interpretation of the complicated symptoms of pain attacks that are too often diagnosed, as well as treated, as headache, neuralgia, or migraine, etc.

TREATMENT: The principles to be applied for the relief of the various deflections are "surgical." All methods have their foundation upon individuality of the operator. At present there are four methods in vogue, which with some one of their various modifications are usually selected. The principles involved in their correction are first to depress the floor, if possible, and thus minimize the arch. Second, to remove the excess of cartilaginous or bony tissue. Third, to replace the septum in its normal position. Fourth, to facilitate its maintainance in that position. All the necessary preliminary attention being concluded and the method of operation selected, the nasal cavity is cleansed by irrigation with a mild alkaline antiseptic solution, and, if thought advisable, douched with 1-5000 bichloride solution. The anesthetic, if local, is usually cocaine, 4 to 10 per cent. solution, combined with or followed by adrenalin solution. In general anesthesia, chloroform is given preference.

The first method properly includes all forms of cleft palate simply because the relationship is only one of degree. Consequently, the

oral surgeon is usually consulted relative to the repair of the palatal deformity which is operative, or the depressing of the elevated arch, which is usually mechanical.

In the second either the nasal saw, drill, gouge, knife or scissors are selected for the removal of the excess.

The third, or process of returning the septum to its proper position, is accomplished by one of the four following methods:

First, forceps as devised by Ash are used to make a cross incision. The points at intersection are pushed through, toward the concavity, until resistance is overcome at the base, when they are allowed to fall back to the perpendicular position to be maintained by some form of splint, perforated metal, or hard rubber, also rubber in sheet form or tubing. The angular as well as the straight cutting forceps are quite formidable instruments and their use generally necessitates an anesthetic, but to my mind is far preferable to the old form of stellate septal punch or any of its modifications for the same purpose devised by Adams. Second, Kyle's various instruments for removing a V-shaped section from the convexity. Third, Gleason's method consists in a U-shaped cut, first incision made at posterior border on concave side, second at anterior border on convex side; then, by joining both at the base, a tongue of cartilage is the result, with its base attached above, which is to be pushed through the opening high enough to practically overcome any resistance it may have, and then let it fall back to the perpendicular on the concave side, where the crest of the superior maxillary bone will be sufficient to prevent its return to former position, after a few days' packing with antiseptic gauze. Fourth, with a right angled, sharp pointed punch and a curved, blunt pointed septal knife, Douglass makes most of these operations successfully, and in my experience, this method is much more easily, as well as perfectly made than with the other instruments mentioned, more especially as the field of operation is, or should be, under constant observation, thus giving complete control of all the various necessary incisions.

To facilitate the reposition which at times requires considerable force, a broad, strong septal forceps (Ash) are of useful assistance to the operator. Dressings, if sterile gauze is used, will be left in position for forty-eight hours and replaced by a new dressing, or followed by a splint. If splints are used, the cavity is to be irrigated every two hours for twenty-four hours, which not only gives relief, but lessens the tendency to infection. This treatment is continued until satisfactory union has occurred or all other abnormalities are removed.

Discussion.

DR. G. E. SEAMAN, Milwaukee.—I have very little to add to what the author has said in this very excellent paper, which covers the subject briefly, but very well. I must, however, disagree with the idea that congenital deformities, or congenital mal-development is responsible for the largest number of cases of septal deflection. I do not believe that this statement can be borne out by the facts. It is true that lately it has been recognized that deformity

of the palatine arch is responsible for this condition, in a large number of cases, and that operations or measures for the straightening of the arch are followed with good results in the matter of septal deformity. I believe that it is true that septal deformities, especially such as give rise to any symptoms at all of obstruction, either to respiration or to drainage of the nose, are not frequent in children. The fact is that it is coming to be more and more regarded as true that septal deformities are only injurious where they serve as an obstruction either to respiration or to drainage of the nose; and I do not believe that an operation for septal deformity, except where these conditions exist, is necessary in most cases. I have come to regard the nose as being a useful organ just so long as it is unobstructed and as being an organ that should not be operated upon so long as it is unobstructed, so long as breathing is free and drainage is good.

As to the particular operation to be selected in these cases, and especially when this is a matter for consideration on the part of the general practitioner, I believe that it is sufficient to say that the septum should be straightened, and that it should be straightened in the simplest possible manner. It is true that specialists have devised all sorts of instruments, have laid down all sorts of rules with respect to operation, and a great many of them which may be said to be somewhat confusing even to the specialist himself—rules as to the angle of the incision, the particular place of beginning the incision, the particular kind of an instrument to use, whether it shall be a right-angled punch, or whether it shall be a T punch, or whether it shall be a straight punch or an angle punch, and all that sort of thing. The fact is that each individual case must be treated on its own merits. You examine a nose which is the subject of septal deflection and you will find as a general rule where the deflection is sufficient to necessitate an operation, other conditions are present; you find dislocation of one or the other of the cartilages of the septum, you find exostosis, you find enlargement of the turbinals, polypi, and various other conditions. They are all to be treated upon general principles; and the amount of work should be done that is necessary to give the patient a comfortable nose, and only the amount that is necessary to do that.

I have never regarded these various specially devised instruments as necessary in the majority of cases. I think that a man can do everything that can be done, and do it just as well with a bistoury, and he can start his incision wherever the condition of the septum indicates that it should be started, and end it where it is necessary to end it. I have seen good results in a number of cases by the simple use of the knife, making either a cross incision or one straight incision from above downwards, and in some instances from before backwards, and making the incision a beveled one, and applying the amount of force necessary to straighten the septum, and afterwards applying a hard rubber, perforated tube and using the measures of cleanliness mentioned by Dr. Nye.

There is one thing, however, that is true of all operations on the nose. Cleanliness should be thorough. Infection frequently follows operation on the nose where cleanliness is not thorough. The condition of sapremia following these operations is not at all infrequent, so that great care should be taken. I do not regard it as necessary that a general anesthetic should be administered in an operation of this sort, if the patient is a person who can be controlled without an anesthetic; an adult can generally be controlled very

well, and the operation completed by the use of a local anesthetic, together with the use of adrenalin to control the hemorrhage.

DR. H. B. HITZ, Milwaukee.—In listening to this interesting paper several ideas have occurred to me that may be worth mentioning. One of them is in regard to the elevation of the hard palate that frequently occurs in these cases. It is of very common occurrence to find that the vault or roof of the mouth rises very perceptibly in some cases of septal deviations. It seems to me that this class of deflections are due rather to the rising of the vault, than to injury. The reason of this rise of the vault is a difficulty in breathing through the nose, adenoids being the principal cause of those cases which are seen earlier in life. I agree with Dr. Seaman in his remark that congenital deformity of the septum is extremely rare. I have occasion to see a large number of children with deflected septa, and if I cannot get a history of injury to account for a deformity, I can usually find some other reason for it than that of congenital disturbance. Most children meet with many falls early in life, particularly in the first year. A child may fall from a chair, or it may roll over on the ground and bump its nose. The result is that the septum is more or less injured. Frequently these injuries do not become manifest until later on, until the nose begins to take on the adult form, and then the site of injury is apt to develop more rapidly than otherwise, resulting in a deflection.

There is one interesting observation which seems to me, while not directly in line with this branch of the subject, accounts for a certain number of cases of nasal obstruction, where the septum has not become deformed, and it is the ridge so often seen in the roof of the mouth, which I think Lombroso called a stigma of degeneration. This ridge is unquestionably due to the fact that the septum in these cases is exceptionally firm, and by reason of the nasal obstruction occurring perhaps a little later on in life, its effects is to cause a rising of the hard palate on each side, leaving this ridge in the roof of the mouth; of course this has nothing to do with septal deformity, except in so far as showing how, when the septum is not so rigid, it would rise and necessarily be deflected, the ridge spoken of, in consequence, being absent. Many of these deflections are curves and not breaks.

There is one observation which Dr. Nye failed to mention. It is in the application of cocaine in the operation for deflected septum. One can get a perfect anesthesia of the part to be operated upon by direct application of the cocaine, say a 10 per cent. solution, with the probe—in preference to copious spraying of the nasal cavity. This I think is very important.

There is one other suggestion not touched upon in the paper, and it is in regard to an additional means in the diagnosis of these cases. Some one suggested a number of years ago, to move the patient up before a glass, and let him breathe on it gently, with his mouth closed. The volume of air coming from each nostril is very clearly depicted, and frequently in cases of deflected septa show the character of the abnormality.

DR. NYE (closing)—One could write a whole volume on the subject, which in the allotted time I found to be impossible. This question by Dr. Seaman as to a congenital defect of the septum does not touch the point. The congenital defect is the dental arch. That is what you want to look for first, which always occurs before your septum is disturbed. That is the point I brought out in the paper. When a child gets a fall on the nose, what

occurs? It has a little swelling or intumescence, causing a slight nasal obstruction, therefore using its mouth to increase the breathing space. If there is any congenital malformation present the tendency is for elevation of the "dental arch" to occur, followed, not preceded, by hypertrophy of the pharyngeal tonsil or "adenoids."

In regard to polypus formation—this is exceedingly rare, except in long standing cases of nasal disturbances due to imperfect drainage from one or all of the accessory sinuses.

The suggestion made by Dr. Hitz concerning the spraying of cocaine into the nares is good. Personally I rarely spray cocaine into the nose, except it be for an acute condition, but seldom for operative work.

In regard to diagnosis, I advise physicians to make careful inspection of both nasal spaces. I consider this the correct method to diagnose the internal arrangement of the nasal cavity.

AN INTERESTING CASE OF NASAL DEFORMITY CORRECTED BY THE "PARAFFINE METHOD."

BY HENRY B. HITZ, M. D.,
MILWAUKEE.

So rich and fruitful has been the progress of modern medical science, that but a comparatively few of the discoveries have received the mead of praise that is justly their due. Of these none has been more fruitful of beneficial results than the discovery of the value of subcutaneous injections of paraffine.

The case here presented appears to be unique—so far as I am aware—as to its cause and the character of the lesion, and it is much to be regretted that the poor illustrations here presented fail to adequately show the deformity and its excellent correction.

H. S., age 29, single, male, of small stature and delicate build, became my patient two years ago. At that time he was suffering from an intumescent rhinitis for which a linear cauterization was done, with complete relief to stenosis, and consequent improvement in general comfort. His nose was well shaped and aquiline in character, with rather a high bridge Several months later he suffered an attack of acute inflammatory rheumatism which left him in a debilitated condition. He was then lost sight of, until last spring, when he appeared at my office with his facial appearance completely altered by a horribly deformed nose. He gave the following history: About 18 months previously he had been taken with a severe cold in the head that lasted several weeks. Towards the end of this cold his external nose became very much inflamed and nasal respiration was completely occluded by what must have been an acute swelling of the septum. The inflammation spread across the face as far as the ears. He did not remember that there was any large amount of discharge, nor any sudden increase of it, other than that usually accompanying a bad "cold in the head." This condition was accompanied by fever, head-

ache, and general prostration lasting a week or more, which then gradually subsided. The tenderness of the nose was very acute and persisted for a considerable period. Subsequent to this attack the anterior or cartilaginous half of the nose began to retract and became pale and cyanotic in appearance.

Careful questioning and physical examination failed to develop any suggestion of specific or other organic dyscrasia. In general his condition was below normal.

Local examination: The tip of the nose was sharp and pinched and the alae sunken. The nostrils were narrowed and collapsed, but there was no interference with nasal respiration. The bony bridge was high, and the sudden angular descent of the soft structures made a curious effect. The entire cartilaginous part was soft and freely movable. By grasping the mucous membrane that covered the cartilaginous septum, between the fingers, it was found that the triangular cartilage was conspicuously absent, though no perforation existed and no scars were present. There was no pus in the nose, and on the whole its inner arrangement was as it should be. The suggestion that

in the paraffine method he might expect much improvement met with considerable enthusiasm from his family, but the patient did not take kindly to the idea. However, in August last he appeared again for treatment. He was taken to the hospital and without an anesthetic the injection was made with remarkable little discomfort and very satisfactory result.

Technic: Prosthetic paraffine with a melting point of 115 degrees was used. The patient was prepared the night before by thoroughly scrubbing the nose with soap and water several times, followed by alcohol and ether, after which a moist boric acid dressing was applied. The next morning it was again cleansed with alcohol and ether.

The syringe used was an ordinary metal piston syringe, with a large caliber 1¼ inch needle, thoroughly cleansed and boiled, the needle being wrapped with rubber tissue to ½ inch of its point.

The paraffine was thoroughly sterilized and the syringe filled and placed in water about 125 degrees.

The nose was grasped in the left hand, with the thumb and forefinger holding the mucous membrane of the septum; the syringe was then lifted from the hot water, and, after seeing that the lumen of

the needle was free, it was rapidly thrust in, just above the margin of bone directly in the median line, and carried rapidly downward to the floor of the nose, the forefinger and thumb guiding the needle between the two layers of mucous membrane. The piston was then pressed, but failed to budge. The needle was hurriedly withdrawn and found to have a plug of paraffine in the end—which was ejected, and the syringe laid back into hot water. Hot cloths were then placed over the nose for five minutes, when the injection was again tried, the needle entering the same opening. This time no difficulty was experienced, the nose being shaped carefully with the left hand as the paraffine was injected and the syringe withdrawn. There was a small depression left just back of the tip, probably due to some cicatricial binding down from the original inflammation, so that a small amount of paraffine injected just beneath the integument at this point failed to lift the depression.

Aristol was dusted over the two punctures and a collodion dressing applied. The patient was then put to bed and iced wet boric compresses applied for 24 hours. Recovery was uneventful, there being but little edema, though some redness, and—to the patient's great annoyance—a polished condition of the skin at the edge of the nasal bones remained up to about one month ago, when it began to disappear.

Conclusion: The history of the cause of this deformity leads one to suspect either a septal abscess or an erysipelas. The absence of knowledge, on the part of the patient, of the sudden emptying of an abscess or increase of nasal discharge, with the apparent absence of scars, is not against the abscess theory, and the probability would seem that the condition was an erysipelas plus an abscess of the septum, which may have discharged posteriorly—possibly at night. On the other hand, however, the absence of any considerable amount of cicatricial binding down of the septal mucous membrane would be against the abscess theory. May the condition not have been an erysipelas with thrombosis of the main nutrient vessels of the cartilages, which resulted in a more or less complete resorption of these structures?

Regarding the one difficulty in the injection, that of plugging of the needle, but one explanation can be satisfactorily given and it is one well worthy of consideration. At the instant before injection the paraffine flowed freely, but, owing to the character of the lesion, it was necessary to carefully insert the needle so as to avoid puncturing the septal mucous membrane, and causing serious infection. The circulation of this atrophied region was such that it was distinctly cool to the touch. The result was instantaneous hardening of paraffine in the needle upon contact, which was avoided in the second injection by the application of hot cloths to the nose.

WISCONSIN MEDICAL JOURNAL.

OFFICIAL ORGAN OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A Monthly Journal, published by the Wisconsin Medical Journal Publishing Co., and owned by and devoted to the interests of the Medical Profession of this State.

Original articles, Clinical notes, Correspondence, and Communications of interest to the Medical Profession are solicited. Reprints of articles contributed to this Journal will be furnished at cost price, but a number of copies of the Journal will be furnished contributors gratis. All manuscripts should be typewritten.

ARTHUR J. PATEK, A. B., M. D., Editor,
121 Wisconsin Street, Milwaukee.

Associate Editors.

CHAS. S. SHELDON, M. D., Madison.
HOYT E. DEARHOLT, M. D., Milwaukee.
OTTO H. FOERSTER, M. D., Milwaukee.
ALBERT W. MYERS, M. D., Milwaukee.

Collaborators:

Horace M. Brown, M. D.,	Milwaukee	U. O. B. Wingate, M. D.,	Milwaukee
Arthur J. Burgess, M. D.,	"	Chas. Zimmerman, M. D.,	"
Richard Dewey, M. D.,	"	Frank H. Edsall, M. D.,	Madison, Wis.
Louis Frank, M. D.,	"	W. E. Fairfield, M. D.,	Green Bay, "
Walter Kempster, M. D.,	"	Wm. E. Ground, M. D.,	W. Superior, "
William Mackie, M. D.,	"	Julius Noer, M. D.,	Stoughton, "
Solon Marks, M. D.,	"	Chas. W. Oviatt, M. D.,	Oshkosh, "
P. H. McGovern, M. D.,	"	L. H. Prince, M. D.,	Palmyra, "
Gilbert E. Seaman, M. D.,	"	H. Reineking, M. D.,	Milwaukee, "
Wm. H. Washburn, M. D.,	"	W. T. Sarles, M. D.,	Sparta, "

Annual Subscription, - - - $2.00. Single Copies, - - - - - $0.20.

Address all business communications to
M. M. TAYLOR, Business Manager,
709 Herman Bldg., Milwaukee, Wis.

CHICAGO OFFICE:
J. L. McKENNA, Commercial Nat. Bank Bldg.
175 Dearborn Street.

Vol. II. FEBRUARY, 1904. No. 9.

EDITORIAL COMMENT.

THE RETIREMENT OF DR. U. O. B. WINGATE FROM THE STATE BOARD OF HEALTH.

The JOURNAL has taken the precaution to look into the facts, and is of the opinion, based upon careful inquiry, that the retirement of Dr. U. O. B. Wingate from the position of secretary of the Wisconsin State Board of Health must be looked upon by the medical profes-

sion as a distinct loss to the state and a menace to the efficiency of the Board. There are, of course, other men in the state who may become competent to fill the position of secretary of the State Board of Health, but they are not made in a day, and it is not at all probable that any man who takes up the work without long experience will render as efficient services as Dr. Wingate has given. Dr. Wingate is recognized throughout the whole country as a most excellent sanitarian, and as an authority on this subject. He had brought the State Board of Health to a high state of efficiency and retires with the respect and entire confidence of the medical profession.

Dr. Wingate's retirement is not in the interest of the people or the public health, nor is it due to any lack of fitness; political reasons only have dictated it. In the language of one of the political members of the State Board of Health—"this plum should be passed around."

We know whereof we speak when we say that the method of this retirement is discreditable to those members of the State Board of Health who manipulated the deal, discreditable to the state administration, and unwarranted by Dr. Wingate's long and efficient conduct of the office.

The public health is too vital a matter to be subjected to the vicissitudes of politics.

The position of secretary of the State Board should be occupied by a recognized sanitarian, who should hold office so long as his professional fitness is unquestioned; lack of fitness of the incumbent should be the only reason for a change.

As physicians we earnestly protest against the mixture of politics with public health. If the politicians of this state were to grasp the force of these facts and were to consult the best interests of the people, we should not again be treated to the spectacle of the underhanded removal of a thoroughly competent medical official at the period of his greatest uesfulness, and for the stupid reason that the "plum should be passed around." We understand that Dr. Wingate contemplates retiring altogether from the Board, and we voice the sentiments of hundreds of physicians when we express the hope that he may remain and continue to give the people the benefit of his ripe experience in public hygiene. This action may not be appreciated by the hungry horde of political plum pickers, but it will be appreciated by the medical profession and the intelligent public.

THE DETENTION HOSPITAL AS A MEANS OF CLINICAL INSTRUCTION IN INSANITY.

We have received from the pen of Dr. H. N. Moyer, editor of our able contemporary, *Medicine*, a communication called forth by the editorial in our last issue on a "Detention Hospital." Dr. Moyer is well known as an alienist and neurologist of special ability and he urges, apropos of needed temporary provision for acute cases of insanity, that appropriate provision be made for such cases in connection with some general hospital and that the opportunity thus afforded for clinical instruction be taken advantage of to give to medical classes a knowledge of morbid mental states, of which there is today a lamentable lack in the profession at large. Dr. Moyer believes that an arrangement for rooms or wards for the insane in a general hospital, readily accessible for purposes of teaching, is preferable to a separate building of detention, for the reason that, in his opinion, the work can be equally well done in such a location; and furthermore, that there has always been too wide a separation between mental diseases and all other branches of medicine, causing a tendency to isolation both of the patients and the men engaged in their treatment; this has been mischievous for all concerned.

This state of divorce has been an unhappy one. General medicine, so to speak, has been obliged to furnish a grudging alimony for separate maintenance, while if the two had lived amicably together, both would have been better off. The institutions for the insane have been, both in their location and in the regard of the profession and public, quite apart from the ordinary every day practice of medicine. Throughout the land among the thousands of medical graduates annually sent forth, it would be difficult to find one in a hundred who had any knowledge, experience, or skill in mental diseases. Most physicians pass through their entire course of study without any practical knowledge of either the diagnosis or treatment of any form of insanity, and in later years when such cases occur in their practice, manage in nearly every case to do those things which they ought not, or leave undone those which they ought to do. They send patients away to travel, who ought rest at home; keep them at home sometimes till the case is hopeless, when they ought to send them promptly to a sanitarium or hospital for insane; commit them to a public asylum when they would recover in a week if properly nursed in their own home; keep them overwhelmed with morphine or other narcotics when they would do better with warm baths and hot milk:—all because they have never

had any practical instruction. We cannot stop here to inquire how this state of affairs has grown up,—(that is a story in itself)—suffice it to say that a re-examination of this question in the enlightenment of the present day will show that the vast majority of the insane are as easily cared for, or more so, than typhoid fever, gun-shot wounds, pneumonia, meningitis, and appendicitis; indeed, for hysteria, neurasthenia, organic brain diseases of all sorts, cases of acute poisoning—accidental or suicidal—cases of intoxication or acute delirium, the detention hospital, or the psychopathic ward of a general hospital, would be the most appropriate place.

There is at the present day a tendency to give more attention to mental diseases, and indeed, why should there not be? There is no department of medicine which abstractly would possess greater interest or fascination but for the ignorance and prejudice that have grown out of the conditions prevailing in the past. To-day, in many of the medical schools, much attention is beginning to be given to the teaching of psychiatry, and men will in the future scarcely graduate in a well-regulated school without at least learning the rudiments of insanity and having a few cases presented clinically. This is something that ought be encouraged, and in connection with the provision for acute cases of insanity as they present themselves in our larger cities, a fine opportunity for such instruction is afforded, provided the detention hospital is allowed to be utilized for instruction and is so located that it is accessible. The contention of Dr. Moyer that cases of mental disease should be provided for in connection with the general hospitals is a rational one.

We are of the opinion, as far as Milwaukee is concerned, that the plan of providing for alleged cases of insanity in connection with the Emergency Hospital would be a step in the right direction, and we trust that arrangements will be perfected to this end. Then, after provision is made for temporary cases of the alleged insane in a suitable manner, a clinic in insanity should be established and so provided as to be accessible to students for clinical teaching and instruction in psychiatry.

COUNTY SOCIETIES VERSUS THE QUACK.

It is but necessary to speak the word "quack" or "charlatan," and every decent physician is up in arms in vehement denunciation of this class of knaves. How many of us, however, turn a hand to what must be considered not a task but a duty—namely, to abrogate in a measure this evil? Are we giving the matter any fair degree of

consideration? Spasmodically yes, systematically and concertedly no; the former accomplishes nothing, the latter might be productive of some good, and is therefore worthy of every honest physician's best efforts. That the task is stupendous, we well know, but dogged persistency is needed, and if put to the test, may win out.

Two solutions have recently been advanced, and merit notice. In an address published in the *Colorado Medical Journal*, and delivered before a medical body in Denver, an attorney, Mr. Hawkins, says *apropos* of the good work done by a grievance committee of attorneys in driving most of the shyster lawyers out of Denver: "What the attorneys have accomplished and are now accomplishing in their profession, you can accomplish in yours. If you will appoint a grievance committee and it will act fearlessly, the criminal abortionist will soon leave Denver for other pastures. This committee would see that these advertisements read to-night shall cease. The law is ample on this subject. This committee would furnish information to the prosecuting officers and aid them in procuring convictions. Such a committee could easily prevent cases being dismissed without trial. Having back of it the influence of the hundreds of good physicians in this city, your committee would be a great power for good. One member of the medical profession said here to-night that the physicians did not feel called on to act as policemen. The legal profession has found that such a position is a mistake. Every profession needs its policemen, and that is exactly what the members of our legal grievance committee are. Until the medical profession appoints a police force and puts it to work, I submit that you have no right to complain that you have in your ranks quacks and abortionists."

That convictions are difficult, is uncontradicted, but this is because the evidence is insufficient, and the indictments often faulty. But here is a possible and workable solution, and ought to be hailed as such, not with words of approval, but with acts signifying approval.

Dr. H. Blank of Jackson, Wis., in a paper read at the Washington County Medical Society, said: "Possibly a law giving the State Board of Medical Examiners the power to revoke the license of any medical practitioner found guilty of unprofessional and disreputable conduct, might in a measure have the effect of at least partially suppressing charlatanry."

The legal fraternity has organized within its ranks a court that passes upon the acts of its members, and disbars from practice those found guilty of dishonest and reprehensible practices. We physicians, however, have to content ourselves with retaining in our midst—

once a license is granted—every thief and murderer who has filled the law's requirements. These are matters that ought have liberal discussion at county meetings, and when the various county societies have done with them, then the field of battle may be shifted and the matter presented, well threshed and concise in form, to the State Society. In this way, whatever be the action taken, it will be stamped with the opinion—expressed or implied—of 2,500 honorable physicians; who will say that such a vote is devoid of strength, whatever the issue be?

GOOD WORK AND THE CROWDED WAITING ROOM.

It goes without saying that the medical profession is overcrowded, yet in no other vocation are its exponents so busy burning their candle at both ends. We are diminishing disease by our constant advocacy and dissemination of sanitary knowledge, and our colleges are busily engaged in the manufacture of competition, by constantly increasing our number with better prepared medical graduates, thus cutting off our means of income at both ends.

The public is being educated in another way, and we may well welcome this advance; the old doctor who just felt your pulse, looked at your tongue, wrote a prescription, and rushed away to the next case, making twenty-five, fifty, or even more, calls a day, does not now get the chance to see as many patients as he used to, for the younger and better educated man is crowding him out. The latter takes time for proper examination, calls to his aid modern laboratory and instrumental methods for diagnosis, and studies his case before giving an opinion and instituting treatment. This is the kind of medical advisor the better element of the public now demands.

Public opinion is likewise growing against the former slip-shod and snap methods in office practice—where the appliances for scientific work are, or should be, at hand. The simplest complaint should be carefully investigated, and in most instances, not only a local but a general examination is demanded, if we do what is right for the patient and what he hires us to do.

There comes a time in the life of a successful practitioner when his waiting room becomes crowded or he is called to many more cases than he can properly treat, and in the endeavor to hold them he is overworked. Let him then take an assistant from the scores of really capable young practitioners who are barely eking out an existence, cut out his night calls and otherwise limit his practice, letting the "other fellow" get some of his cases, thereby himself leading a more normal, useful, and longer life.

IN RE ANTITOXIN.

The manufacturers of antitoxin are indignant at the charges recently preferred against them that they—the producers of this much-needed remedy—had formed an agreement among themselves with the expressed purpose of increasing the price of the article. Two manufacturers have requested us to correct the wrong impression created. Their comparative figures show that not only has the price of antitoxin not been raised, but it has actually been reduced.

	1000 units.	3000 units.
1903 price	$2.25	$5.75
1904 price	2.00	5.00

While formerly all manufacturers put upon the market two grades of serum, there is henceforth to be marketed only one antitoxic potency, the concentrated variety.

That the antitoxin of higher concentration has many advantages over the weaker, is obvious to all physicians, and this would seem to justify the reduction in the number of packages necessitated by the manufacture of two grades. This matter comes to us more forcibly if we recollect the readiness with which the producers exchange old goods for fresh, for antitoxin, as we know, deteriorates with age.

OYSTERS AND TYPHOID FEVER.

While it cannot be claimed that Milwaukee is in the throes of an epidemic of typhoid fever, it is nevertheless apparent that there are numerous cases of the disease among families of social prominence and affluence. We have been unable to convince ourselves that infected milk can be the cause of the infection, because the route of no one milk distributor has been invaded, nor is the epidemic sufficiently widespread to justify the suspicion that our municipal water supply is tainted.

Infected oyster beds are a source that is known to have frequently contributed—and at times very generously—to the spread of the disease, and now, when confronted with cases occurring in families who doubtless possess the means to and probably do consume oysters liberally, it is not too wide a stretch of the imagination to think of this as a possible source of infection.

A recent outbreak of typhoid fever in Orange, New Jersey, has been traced to the consumption of oysters obtained from infected beds, and it is interesting to note one little known method pursued of market-

ing the bivalve. According to a statement printed in the *Journal of the American Medical Association*, Jan. 23, 1904, "many people seem to regard the plump white oysters, so often served now in restaurants, as preferable to the grayish, rather thin oysters that the gourmet of a few years ago was accustomed to consider the luscious delicacy best suited to his taste. Because of this false taste, oysters are bleached and rendered plump by dealers on the way to local markets. Normally oysters are accustomed to sea water. If they are removed therefrom and placed in fresh water for a time, they become much whiter than before and apparently grow fat. This plumpness, however, is not due to any addition of substantial material to the oysters' tissues, but only to the retention of more water than under natural circumstances. In a word, it is a question not of digestion of food and consequent accumulation, but rather a freak of osmosis. In order to secure this specious appearance of plumpness, oysters are not infrequently placed in fresh-water streams for a time before being served. Needless to say, with the present increase of population in this country, there are very few fresh-water streams that are not subject to contamination by sewage. Owing to the fact that oysters gather their food from water that flows by them, they are sure to retain any organic particles present, and typhoid bacilli thus find not only lodgement but a favorable culture medium in the oyster tissues. The fresh water apparently renders digestive processes in the oysters so sluggish that bacilli thus retained are not digested, as would be the case under normal conditions of life, but on the contrary, actually increase in numbers, leaving the host still more incapable of resisting invasion."

It may be well therefore for those of us who like to indulge in raw oysters, to make inquiries from time to time as to the source of the supply furnished, though ignorance on the part of the dealer would probably discourage such inquiries. What is stated, however, as to discrimination to be used in selecting the species of oyster, this is certainly at our command, and may eliminate one possible source of infection.

NEWS ITEMS.

The International Congress of Ophthalmology at Lucerne, Switzerland, promises to be a brilliant and attractive function. It has been fixed for the 19th, 20th, and 21st of September, 1904, presumably in order to avoid the rush of the tourist season in Switzerland. This Tenth Congress is to be presided over by Dr. Deucher, President of the Swiss Confederation. The one official discussion will deal with the important practical point of indemnity as regards the value of a lost or injured eye. For this report Prof. Dr. Sulzer, of Paris, has been selected for France, Prof. Dr. Axenfeld, of Freiburg, for Germany, and Dr. H. V. Würdemann, of Milwaukee, for the United States of America and Great Britain.

Diplomas Refused Recognition.—The Wisconsin Board of Medical Examiners has refused to recognize the diplomas of the National Medical University, the Harvey Medical College, and the Jenner Medical College, all of Chicago. These colleges have been investigated by members of the Board and found to be not up to the standard of the Wisconsin law. The wonder is that Illinois and Chicago continue to tolerate so many mushroom and sundown "Colleges."

The Need of a Detention Hospital.—A citizen of Milwaukee suffering with the delirium of fever was recently taken to the county jail, whence he was removed on a temporary writ to the Insane Hospital; there it was determined that he was not insane but that he was suffering from smallpox.

Let us have a Detention Hospital, and stop this disgraceful business of throwing sick people into jails and police stations!

Dr. Philler Appeals to Court.—Dr. Hugo Philler, of Waukesha, has taken an appeal to the circuit court from the decision of the county board in cutting his bill. The bill was for $30.20 for services at post mortems and was cut $10 by the auditing committee. Last year one of the physician's bills was cut by the board, and he subsequently recovered the entire amount in the circuit court.

Enterprising Juniors.—A woman who was recently arrested on complaint of the Milwaukee Health Department, for failing to report a birth in her private lying-in hospital set up the plea that she was running the place for the benefit of the Juniors of a medical college.

Dr. Edmund Andrews, a pioneer surgeon of Chicago, and one of the organizers of the Medical Department of Northwestern University, died at Mercy Hospital, Chicago, Jan. 23.

Dr. V. B. Gregory, of Janesville, has entered the Government service, and expects to do duty at the Government Hospital at Colon, during the construction of the Panama Canal.—

A new chemistry building to cost $100,000, will be erected at the University of Wisconsin, Madison, during the coming summer.

Dr. J. M. Saunders, a physician at Milton, Wis., for many years, died Jan. 23, at Dodge City, Minn.

Dr. G. E. Seaman has been elected oculist to the staff of the Children's and the Milwaukee Hospitals.

CORRESPONDENCE.

THE DECADENCE OF VIENNA AS A MEDICAL CENTER.

(Special Correspondence.)

While the medical department of the University of Vienna still offers the best instruction to foreign students, especially to those not seeking a specialty, its rank among the schools of Europe is rapidly on the decline. Ten years ago it was still the acknowledged medical head; to-day almost all of its regular students are from Austro-Hungary or Russia,—a German, for instance, is a rarity. The reasons are quite apparent to anyone who has spent some time at Vienna and has paid attention to the condition of affairs. In the first place, the hospital is very old—it was begun 150 years ago; its most recent part can hardly be less than 50 years old. Some of the laboratories connected with it, the anatomical, physiological and pathological, it is true, nearly satisfy modern requirements. The government is on the very of bankruptcy and cannot spend any money on the improvements of its medical institutions. One method of economizing was well illustrated in the last years at Graz. There were at least three important vacancies in the medical department, among others the professorships of internal medicine and skin diseases. The University had no funds to spare, and therefore spent several years in offering these positions to men, who, they were sure, would not accept. In Vienna they cannot pursue this policy; there are too many students. They offer their vacant professorships—at present there are two—surgery and syphilis—to first-class men at small universities, and their offer is politely, but firmly refused. Finally a star of lesser magnitude is selected and may grasp the opportunity to make a reputation and a fortune. Czerny, Bier and Bruns have recently refused the chair formerly occupied by Billroth. Lack of room and suitable accommodations are not the only cause for this retrogression.

The tendency of the political party in power, the "Christian Socialist," is far from one of encouragement to the medical profession. As has been the case in some of our American cities, demagogues here have chosen the system of medical education as a point of attack. There is no doubt that the whole object of the movement has been self-aggrandizement. The parliament of Lower Austria, in which Vienna is situated, has recently been attacking every method of medical teaching and research. Vivisection, demonstration of patients

before students, and the removal of parts of corpses for teaching purposes have all been bitterly censured. Politzer especially, has been severely criticized for removing the inner ear from bodies of patients who died at the poor house. One representative, Steiner, claimed that a student had asked his permission to inoculate a pregnant woman with smallpox to see if the child would run the course of the disease. He had, of course, indignantly refused. This appeared too palpable a falsehood. On being challenged to name the student, he modified his statement to the effect that the student asked him to be allowed to vaccinate a gravid woman and to test the reaction of the new-born child to vaccine. Other similar methods of attack have been used. Lueger, mayor of Vienna and leader of the party, stated that until a scientist could produce a blade of grass which a cow would eat, he would declare the whole clique quacks and imposters. This attitude provoked great indignation among the entire medical profession. The students marched in a body to the city hall to denounce Lueger, the only result apparent was the arrest of about a dozen. This state of affairs has served to keep away many prominent men who formerly would surely have been glad to accept positions in Vienna.

Medicine has receded here rather than advanced, and for German students many places are much better for the study of medicine than this. But there are other reasons why the German student has lost his love for Vienna. One of the chief ones is the large number of foreigners, and especially Americans. These practically monopolize the more desirable courses. Some courses are strictly limited to Americans; in others the prices are so high—and they are growing from year to year— that the majority of Germans prefer to keep away from them. These courses are given by the first and second assistants at the clinics, while third and fourth assistants, less capable men, try to teach the students. Protests have frequently been made, notably at the Student Congress of last spring, against these methods, but without avail. And chiefly because the heads of the departments believe that such courses promote cramming, and that the students would avoid the large clinics. Again, as they say, this is the only source of income to the assistants whose term of service is seven years. Some of these receive no salary, others one which hardly deserves the name.

For these reasons the sad condition and the sadder prospects of medicine in Vienna. Students are very much fewer, and even the foreign physicians are becoming less numerous from year to year.

(L. M. L.)

BALTIMORE LETTER.

(Special Correspondence.)

On October 26th a second meeting was held, the program being opened by Dr. Cullen with a report of six cases of *extra-uterine pregnancy* which he had seen and operated upon during the last month. The histories in brief were as follows:

1. Patient 30 years of age, complaining of pain in abdomen of six weeks duration. She was nursing a child and hence there was no menstrual history to be had. The temperature was normal. Examination revealed a mass as big as a fetal head and doughy in consistency. Exploration showed a ruptured left tube and a pelvis full of tarry blood.

2. Patient 30 years old. History of sudden pain in right iliac region followed by fainting. Two attacks of this nature followed. No menstrual periods had been missed. The cervix on examination was soft. A mass was felt on the right. Temperature normal. Operation revealed a tube 5 cm. in diameter and a pelvis full of blood.

3. Patient 30 years of age. History of sudden collapse and pallor with abdominal distension. At first there was dulness in flanks, but this disappeared later. This attack was followed by a hemorrhagic discharge from the vagina. An operation was done and the tube found to be 3 cm. in diameter. The pelvis was full of blood and organizing clots. There was no infection.

4. Patient 28 years old. History of bloody discharge following last menstrual period. Pain in abdomen for 24 hours. A mass was felt on the left. Operation revealed an unruptured tubal pregnancy.

5. This case gave a history of a bloody discharge for one month and pain for 48 hours so severe that morphine would not relieve it. At operation a tubal pregnancy was found which had ruptured but only a very small amount of blood had been lost. The placenta, membranes and fetus were all intact.

6. Patient nursing child. History of sudden cramp and bloody discharge. A nodule was felt on the right very closely simulating a myoma. The pelvis was filled by a mass. Operation showed a tube 5 cm. in diameter and a pelvis full of clots.

The second paper was by Dr. Steiner of Hartford, Connecticut. He presented the history of a case of *Arteritis* which had recently occurred in his practice in a patient suffering from typhoid fever. The case was a rather severe one. The arteritis developed on the forty-first day of the disease, the first symptom noticed being numbness in the right thumb and forefinger. The next day the pulse was perceptibly less in the right radial than the left, and on the next day the pulse had disappeared entirely. The extremity became cold and blue and remained so for 35 days, when the circulation was again established and the pulse returned in the radial artery.

The last paper on the program was by Dr. Hume on *Silver Nitrate Injections in Infections*. Ten cases were reported in which the injection was made as a last resort and recovery followed. The typical history of his cases is about as follows: The patient is in a profound state of toxemia from some general infection. He is delirious, has a high temperature and shows signs of imminent dissolution. The leucocyte count is high. An injection of silver nitrate is now given. About 50 milligrams of silver nitrate in 100 c.c. of sterile water is the average dose. This is introduced into the median basilic vein at the bend of the elbow. Soon after the injection—within the first hour—the patient has a severe chill followed by sweating. The leucocyte count goes down to 2000 or 3000, remaining at this level only three or four hours, when it again rises and usually goes higher than it was previous to the injection. At the same time the mind becomes clear and the patient's condition is improved in every way.

Dr. Hume suggested as an explanation of the effects obtained that the solution destroyed large numbers of leucocytes and thus liberated antibodies which he thought would act by neutralizing the toxines. This theory, however, was not received with favor. (R. G. W.)

THE STATE MEDICAL SOCIETY OF WISCONSIN.

ORGANIZED 1841.

Officers for 1903-1904.

F. E. WALBRIDGE, Milwaukee, President.

JAMES MILLS, Janesville, 1st Vice-Pres. C. C. GRATIOT, Shullsburg, 2nd Vice-Pres.

CHAS. S. SHELDON, Madison, Secretary. S. S. HALL, Ripon, Treasurer.

Provisional Councilors.

1st Dist., J. G. Meachem, - - - - - Racine	7th Dist., W. T. Sarles, - - - - - Sparta
2nd Dist., J. S. Walbridge, - - - - - Berlin	8th Dist., J. F. Pritchard. - - Manitowoc
3rd Dist., C. S. Smith, - - - - - Elroy	9th Dist., T. J. Redelings, - - Marinette
4th and 5th Dist., G. A. Kletzsch, - Milwaukee	10th Dist., J. M. Dodd, - - - - Ashland
5th Dist., Geo. V. Mears, - - - Fond du Lac	11th Dist., E. L. Boothby, - - - Hammond

Next Annual Session, Milwaukee, June, 1904.

The Wisconsin Medical Journal, Official Organ.

SOCIETY PROCEEDINGS.

ORGANIZATION NOTES.

The past month shows the following record of progress: Rock County has reported with 19 members; Kenosha has reported a preliminary organization with 7 members; Crawford County reports with 7 members; Walworth with 17 members; Shawano has organized but has not yet reported. This is a gain in the past month of 3 counties and leaves 13 unorganized, as follows: Adams, Richland, Buffalo, Jackson, Pepin, Trempealeau, Calumet, Waushara, Door, Kewaunee, Florence, Forest and Vilas. Most of these counties are sparsely settled and have few physicians, which makes organization more difficult. It may be well to "hyphenate" these in several cases—e. g., Adams might join forces with Juneau, Richland has been invited to join Crawford, Buffalo and Pepin might well go together, as also Jackson and Trempealeau. If Calumet has too few for a good society it might join Manitowoc, Waushara might go with Green Lake, and Florence with Marquette. Door and Kewaunee would naturally go together, as would Forest and Vilas. The record shows that the work is not at a standstill, but more energetic effort is necessary if these 13 counties are to be brought into line within a reasonable period. But two months remain before the annual report from all the counties must be sent to the state secretary in April. Is it too much to expect to have the organization complete by that date?

MEETING OF THE COUNCIL.

A meeting of the Council was held at Milwaukee, Jan. 13th. There were present: Councilors Mears, Walbridge, Meachem, Kletzsch and Sarles, together with President Walbridge, Treasurer Hall, and Secretary Sheldon. The secretary reported the organization of 54 county societies with 959 members, of which number 372 are former members of the state society and 587 new members. The county reports are at present in many cases incomplete—e. g., Milwaukee County reports but 97 members, whereas there are in Milwaukee 250 former members of the state society. With more complete returns and with the remaining counties organized, it is estimated that the state society should have 1,300 members by the time of the annual meeting in June.

Dr. Meachem was elected Secretary of the Council, Dr. S. S. Hall was elected Treasurer for one year, and Dr. C. S. Sheldon, Secretary. After discussion it was voted that former members of the state society should pay the regular dues—$2.00—for the fiscal year 1904 (to Jan. 1, 1905).

A word as to the matter of dues. In this first year of change and readjustment, it is natural, and perhaps unavoidable, that there should be some confusion and misunderstanding which need clearing up. The county societies have organized at different times during the whole year. We have to deal not only with the new members, but also the former members of the state society who are expected to pay the former dues—$3.00—for the year 1903-4. Moreover, the fiscal year has been changed so as to correspond with the calendar year. All this has led to temporary and arbitrary arrangements which will pass away with the present year, when every one will be upon the same basis.

I will make the matter as clear as I can. Since the county societies are made up of two classes—first, those who were members of the state society at the time of the last annual meeting, and second, those who were not members—each class will be considered separately as regards dues. First, as regards former members of the state societey: those who had paid Treasurer Hall the dues for 1903-4 ($3.00) were of course excused from paying the $2.00 dues for 1903 through the county societies. By decision of the Council, however, they are expected to pay the $2.00 dues for 1904. Second, as to the other class—the *new* members: those belonging to county societies applying for charter before Oct. 13, 1903, were expected to pay $2.00 dues for 1903. At that date a meeting of the Council was held, and it was

voted "that a credit of ($1.00) one dollar be allowed all members of the various county societies who have paid their dues to the state secretary before Oct. 13, 1903—which sum shall be applied upon the dues of 1904, and that all societies or members of societies paying their dues ($2.00 to the state secretary) subsequent to that date, shall be credited with the dues of 1904 (to Jan. 1, 1905), and shall be entitled to the WISCONSIN MEDICAL JOURNAL from the date of payment."

This resolution, of course, had no reference to former members of the state society who had already paid Treasurer Hall $3.00 for 1903-4, and was adopted as a measure of greater fairness to the members of county societies organized in the later months of 1903. All county societies reporting and applying for charters after Oct. 13, 1903, are expected to collect the dues for 1904 ($2.00) from all the members, old as well as new. As the secretary remarked in the December number of the JOURNAL, "on account of the change in the fiscal year this plan does a slight injustice to the old members," but fortunately there have been but few "kicks," and most have acquiesced in the decision.

Sec. 13, Chap. IX., of the State Society By-Laws provides that "the Secretary of each component society shall forward its assessment together with its roster of officers and members, list of delegates, and list of non-affiliated physicians of the county, to the Secretary of this Society (the state society) between the 1st and 10th of April of each year," and Section 14 provides that "any county society which fails to pay its assessment, or make the report required, on or before April 15th, shall be held as suspended, etc., until such requirements have been met." This means that each county secretary shall begin "setting his house in order" at once for the Annual Report. Inasmuch as these reports have been necessarily somewhat irregular and incomplete up to this time, a new and corrected report, up to date, will be expected from each county secretary. Only those who have paid the annual state dues should be included, and if any have paid only one dollar, it should be indicated in the report. The societies which reported before Oct. 13th, 1903, will collect $1.00 as dues for 1904 from the new members, and $2.00 from the former members of the state society. Those societies reporting and applying for charters since Oct. 13, will be expected to show that $2.00—the dues of 1904—have been paid by each member on the list.

Up to date only about 750 personal records for the state card-index have been reported; while many of the county societies have been

exceedingly faithful and thorough—several have sent in none at all. The secretaries are urged to push the matter with more vigor and enthusiasm, so that the records shall be as complete as possible by the time of the annual report. The physicians of the state, too, are earnestly requested to co-operate cordially, and to promptly fill out and return the blanks which are sent them.

Upon the whole, the situation is most encouraging. The ranks are forming, the spirit of organization is daily gaining ground, the profession of the state is rapidly assuming a position which comes of a united purpose and action, so that when it shall speak, its voice will be respected and obeyed. (C. S. S.)

DODGE COUNTY MEDICAL SOCIETY.

The annual meeting of the Dodge County Medical Society was held at Beaver Dam, Feb. 1, 1904. Seven new members were admitted, increasing the membership to 24.

Dr. C. F. North read a paper on "Pregnancy, from Conception to the first Stage of Labor." Dr. H. B. Sears presented a paper on "Common Etiological Factors."

The following officers were elected for the ensuing year: President, Dr. E. McDonald; vice-president, Dr. A. F. Schoen; secretary, Dr. H. B. Sears; treasurer, Dr. J. A. Clason; censor for three years, Dr. Wm. Hipke; delegate, Dr. H. B. Sears.

H. B. SEARS, M. D., Secretary.

GRANT COUNTY MEDICAL SOCIETY.

The charter of the Grant County Medical Society was issued Jan. 4, 1904. The society now has a membership of 37, and includes over three-fourths of all the practitioners in the county, and nearly nine-tenths of the regular members of the profession.

LA CROSSE COUNTY MEDICAL SOCIETY.

The regular monthly meeting of the La Crosse County Medical Society was held at the New La Crosse Club on Thursday, January 7, 1904. The attendance showed good interest in the society, nearly every member being present. The president, Dr. F. C. Suitor, delivered the annual address on the subject "Medical Ethics," with special reference to the changes of the long standing Medical Code as modified by the committee of the American Medical Association.

Dr. E. Evans was elected delegate to the meeting of the State Medical Society of Wisconsin.

The regular monthly meeting was held Feb. 4. Dr. A. J. Lester was to have read a paper on the subject of "Pneumonia;" he was, however, unable to be present on account of being ill. There was a good attendance of members, and the subject of "Pneumonia" was profitably discussed by those present, the president, Dr. F. C. Suitor, opening the discussion.

C. H. MARQUARDT, M. D., Secretary.

MANITOWOC COUNTY MEDICAL SOCIETY.

The regular quarterly meeting of the Manitowoc County Medical Society was held at the Hotel Williams, Saturday, Jan. 9, 1904, at 2 P. M.

After a brief address by the retiring president, Dr. J. F. Pritchard, the meeting proceeded to the election of officers for the ensuing year, resulting as follows: President, Dr. Louis Falge, Reedsville; vice-president, Dr. H. Thurtell, Manitowoc; secretary and treasurer, Dr. J. E. Meany, Manitowoc; censors, Drs. C. M. Gleason, A. M. Farrell and J. F. Mulholland; delegates to State Association. Drs. J. F. Pritchard and W. G. Kemper.

After a general and informal discussion of various subjects, the meeting adjourned. J. E. MEANY, M. D., Secretary.

RACINE COUNTY MEDICAL SOCIETY.

At the December meeting of this society 14 members were present out of a total membership of 28. All participated in a general discussion on "Appendicitis." The main points brought out in the discussion were as follows:

1. Do not operate until after the acute attack is over.
2. If an abscess forms use a trocar to draw off fluid or pus.
3. Clean out the alimentary canal at the start but be careful not to carry internal medication too far, rely more upon local applications and starvation for the relief of symptoms, and give nature a chance.

It was the consensus of opinion that a great many of the cases operated on would get well anyway.

The officers of the society are as follows: President, Dr. Walter S. Haven, Racine; first vice-president, Dr. T. N. Schnetz, Husher; second vice-president, Dr. John Meachem, Racine; secretary, Dr. C. F. Browne, Racine; treasurer, Dr. Soren Sorenson, Racine; censors and delegates, Drs. F. R. Garlock, F. J. Pope, and S. C. Buchan, all of Racine.

The next meeting will be held March 3, 1904.

CHARLES F. BROWNE, M. D., Secretary.

WAUPACA COUNTY MEDICAL SOCIETY.

The annual meeting of the Waupaca County Medical Society was held at Weyauwega on Tuesday, Dec. 29, 1903. The following officers were elected for the ensuing year: President, Dr. L. H. Pelton; vice-president, Dr. T. W. Trimble; secretary and treasurer, Dr. J. F. Corbett; censor, Dr. M. C. Crane; delegate, Dr. L. H. Pelton.

The next quarterly meeting will be held at Waupaca, Tuesday, March 29, 1904. J. F. CORBETT, M. D., Secretary.

FOX RIVER VALLEY MEDICAL SOCIETY.

Annual Meeting.

The annual meeting of the Fox River Valley Medical Society was held at Green Bay on Tuesday, Jan. 19, 1904. Two new members were admitted—Drs. A. V. de Nevue, of Green Bay, and Rosa Russell, of Neenah.

A paper was read by Dr. J. R. Minahan, of Green Bay, on "Carcinoma of the Uterus." The various theories of the origin of carcinoma were briefly discussed. The parasitic theory is too new to be as yet accepted without dissent. Cancer is essentially an over-growth, or rapid multiplication of epithelial cells, and once started we cannot arrest its course from one lymph gland to another.

The diagnosis is in most cases easy when the case is first seen. Any patient should be viewed with suspicion who has an offensive watery discharge and repeated hemorrhage, if over 40 years old.

Treatment.—The knife is the only weapon we have. The X-ray is of no use in a case where the growth is over a centimeter deep. The knife should go wide of the diseased tissue, and should include the tissues containing the first series of lymphatic glands. In many cases of hysterectomy for cancer of the cervix the disease will return in the vaginal scar. Therefore the vagina should be cut as wide as possible.

Prognosis.—In 22 cases not one lived over 6 years, although 8 lived 4 years, and 10 lived 3 years. The condition of any patient is greatly improved by operation, to say nothing of the satisfaction of prolonging life for only a few years.

Dr. H. B. Hitz, of Milwaukee, reported a very interesting case of abscess of both frontal sinuses, with successful operation. Various operations for the relief of the trouble were discussed, and the general principles for treatment were laid down.

A paper was read by Dr. C. W. Oviatt, of Oshkosh, on "Non-malignant Tumors of the Uterus." Cohnheim's theory must serve to explain the frequent occurrence of non-malignant tumors. About 90 to 95 per cent. originate in the body, and the rest in the cervix. The differential diagnosis lies between pregnancy and ovarian cyst. These conditions may co-exist.

The symptoms vary greatly. Hemorrhage may be the leading symptom. The accompanying anemia may simulate cachexia. Pain is rare, and the largest tumors do not necessarily give the most pain. Instrumental examination is of little or no use in examining these cases. The sound should rarely be used.

Treatment.—Shall we remove all fibroids? They are at least a potential source of danger, and this is a strong argument for removal. Myomectomy is to be done if possible. Diagnosis is not always possible between malignant and non-malignant tumors. The theory that fibroids will become harmless after the menopause is fallacious. Pregnancy may require hastening the operation, especially if the tumor is near the cervix.

Methods.—Submucous fibroids may be removed by the vaginal route. Myomectomy is good in cases under 35 years of age, but the tumor may reappear. Pan-hysterectomy is not recommended unless the cervix is involved. An experience of over 150 cases teaches the value of early operation.

The following officers were elected: President, Dr. J. R. Minahan; Green Bay; first vice-president, Dr. A. C. Mailer, De Pere; second vice-president, Dr. Edward Sawbridge, Stephenson, Mich.; secretary and treasurer, Dr. J. S. Reeve, Appleton.

At the close of the meeting about 50 members partook of the annual banquet, served at the Hotel Felch. J. S. REEVE, M. D., Secretary.

MILWAUKEE MEDICAL SOCIETY.

Annual Meeting, January 12.

At the annual meeting held Jan. 12, 1904, the following officers were elected for the ensuing year: President, Dr. Leopold Schiller; first vice-president, Dr. D. J. Hayes; second vice-president, Dr. W. T. Nichols; secretary, Dr. H. E. Dearholt; treasurer, Dr. U. O. B. Wingate; librarian, Dr. A. W. Myers; curator, Dr. J. M. Beffel; members of Council, Drs. A. J. Burgess, F. E. Walbridge, G. E. Seaman, A. J. Patek, W. H. Washburn, and T. H. Hay.

Dr. Fiedler addressed the society on the subject of "Hydrophobia," cited cases in the city, and suggested that the society aid the Health Department in getting legislation providing for the muzzling of dogs.

After discussion by Drs. Gillen, Chrysler and Patek, a committee was appointed to draft a resolution to be sent to the proper committee of the Common council. After a short recess, the following resolution was submitted and adopted:

In view of the undoubted existence of hydrophobia among dogs in this city, and there having been several deaths reported as due to this infection, the Milwaukee Medical Society desires to heartily endorse the action taken by the Health Commissioner of Milwaukee with reference to the muzzling of all dogs during a period of time sufficiently long to guarantee the safety of the public.

The president appointed Dr. L. F. Jermain to fill the vacancy in the Milk Commission caused by the resignation of Dr. Bennett.

Regular Meeting, January 26.

Dr. W. H. Washburn read an interesting paper on "Hypochlorhydria Nervosa," reporting five cases in which this diagnosis had been made after careful examination of the stomach contents after test meals. In all these the treatment, stating that in his opinion the fault in treament usually cases the diagnosis was confirmed by the results of treatment. He brought out the points upon which a diagnosis is to be made and also considered the treatment, stating that in his opinion the fault in treatment usually was the administration of too small doses of hydrochloric acid. His custom was to give 15 drops of the chemically pure acid, well diluted, one-half hour after meals and repeat this dose a half hour later. He keeps his patients on a pretty general diet.

In the discussion Drs. Mischoff, Neilson, Rogers, and Patek took part.

Dr. W. H. Nielson addressed the society on the subject of "The Treatment of Typhoid," considering particularly intestinal antisepsis, reduction of temperature, supportive treatment, and diet. He thinks convalescence is often retarded by underfeeding, but the reverse may be true. Particular stress was laid upon the necessity for individualizing the treatment to fit the case, rather than following the same routine in all cases.

The subject was freely discussed and many interesting views on the diet during the febrile period were brought forward. There seems to be a tendency to put patients on a more liberal diet than formerly.

H. E. DEARHOLT, M. D., Secretary.

SOCIETY OF GERMAN PHYSICIANS AT MILWAUKEE.

At the meeting held Jan. 9, 1904, Dr. L. F. Frank reported two cases of *alopecia areata*, which, not influenced by ordinary treatment that had been continued for months, showed after a few weeks, marked improvement under Finsen's light.

Dr. E. Kovâts described a case of *migrating phlebitis*. It occurred in the form of spindle-shaped or cylindrical nodules on various veins of the leg and at the shoulder, jumping from one place to another. With regard to the pathology, K. referred to an article of Neisser, who found that the affection consists in an infiltration between the adventitia and muscularis, and the latter and the intima, leaving this and the lumen intact, always in the neighborhood of a valve. It is due either to syphilis or gout. In K.'s case it yielded to treatment for gout.

Dr. C. Zimmermann reported a case of orbital abscess with ptosis, intense exophthalmos, diplopia, keratitis. V=fingers at 6 feet. Optic disc a little veiled, but no papillitis, veins more filled than normally, arteries not changed. There was a granulating fistula with purulent discharge at the medial portion of the upper lid from an operation, performed elsewhere a few weeks ago, and the left nostril was obstructed by numerous polypi. Z. removed the nasal polypi, which suggested disease of the ethmoidal bone, and, by incision of the upper lid, a sequestrum from the depth of the orbit. A probe, introduced from the orbit through the ethmoidal bone, could be seen in the choana, in posterior rhinoscopy. The patient made a rapid recovery, all symptoms disappeared, and V rose to 20/20. Z. attributes the visual disturbance, aside from the corneal opacity, to stretching of the optic nerve.

C. ZIMMERMANN, Secretary.

OBITUARIES.

RUSH WINSLOW, M. D., OF APPLETON.

BY JAMES S. REEVE, M. D.

Dr. Rush Winslow was born at Koshkonong, Wis., Nov. 7, 1843. He was the third physician in direct line, his grandfather having practiced medicine in Vermont before the beginning of the last century. His father, Dr. Joseph Winslow, practiced at Fort Atkinson, Wis., for many years, and his son studied here before entering Rush Medical College, where he was graduated in 1869. He subsequently took a degree at Hahnemann College, and in 1871 at Bellevue Hospital Medical College in New York.

For two years he practiced medicine in Fort Atkinson, and then removed to Appleton, Wis., where he remained until his death, Dec. 27, 1902.

Dr. Winslow possessed in an unusual degree an enthusiasm for and a devotion to his profession. After 30 years of very active practice, his interest in the progress of medical science was as keen as that of an hospital interne, and few members of the profession were as diligent students and as fully abreast of the times as he. No matter how hard his day's work had been, the lamp in his study always burned to a late hour, and a visit to his office was always an inspiration to younger men. He was in thorough sympathy with scientific medicine in its largest sense, with no room for sectarian or one-sided views, and he was free from any taint of unprofessionalism towards his fellow practitioners.

Dr. Winslow belonged to the distinguished Winslow family of New England, being descended from Kenelm Winslow, a brother of the Governor of Plymouth Colony.

In the midst of a busy practice Dr. Winslow found time for participation in political and other affairs. He had been a member of the board of visitors of the State University. He was very prominent in municipal affairs, and was four times mayor of the City of Appleton. A significant tribute to his standing in the community was shown in the general closing of business houses during the hours of the funeral, the placing at half-mast of flags throughout the city and the general postponement of social events.

Dr. Winslow is survived by a widow and two children, a son who is still in college, and a daughter who had graduated and fitted herself for laboratory and pathological work. It is touching to think with what eagerness Dr. Winslow had looked forward to his daughter's aid and companionship in this work, thus prevented by his sudden death.

Dr. Winslow was a member of the Fox River Valley Medical Society, the State Medical Society and the American Medical Association. He was attending physician at the recently erected St. Elizabeth's Hospital at Appleton, to the inception and building of which he had given much thought and care, and he was President of the Hospital Staff.

MARTIN ROCKWELL GAGE, M. D., OF SPARTA.

BY DR. D. C. BEEBE.

Dr. Martin Rockwell Gage was born April 27, 1825, in Yates County, New York. He studied medicine in Geneva and Buffalo Medical Colleges and graduated from the former June 26, 1852. After graduating he formed a partnership with his preceptor, Dr. Smith, but soon moved to Coudersport, Pennsylvania, and two years

later to Beloit, Wisconsin, where he remained in practice until he came to Sparta in 1856.

In 1862 he was commissioned surgeon of the 25th Regiment Volunteer Infantry, Wisconsin; was Acting Medical Director of the military district of Columbus, Kentucky, in the Spring of 1863; was Brigadier Surgeon in Kimball's division on its forced march to Snyder's Bluff, Mississippi, June, 1863, and was present at the siege of Vicksburg; was Acting Division Surgeon of General Veitch's division on Sherman's march, February, 1864, from Vicksburg to Meridian and return.

At the close of the war he returned to Sparta much broken in health, and commenced the practice of his profession here, where he left it at his country's call nearly three years before.

He served well in many public positions. He was several years physician in chief of the State School for Dependent Children here; was president and member of our city council (then village) several terms, and was the pioneer superintendent of schools in Monroe County for several years; was member of the Wisconsin State Medical Society and permanent member of the American Medical Association. He was also a member of the Knights of Pythias, of Valley Lodge No. 60 F. and A. M., of Sparta Chapter No. 19 R. A. M., and Sparta Commandery No. 16 Knights Templar.

Married first in 1853 to Miss Martha Barnes, a teacher in the Ladies' Seminary at Elmira, New York, who died in Sparta, Wis., in 1856, and in 1858 was married to Miss Louisa Martin, of Beloit, Wis., who survives him. He leaves no surviving children.

My first interview with Dr. Gage left with me the impression that I had met a truthful, courteous, dignified gentleman. My long experience and acquaintance with him since have verified that opinion and much more. Few if any men have been better known in Monroe County and Western Wisconsin than Dr. M. R. Gage. Not only did his skill as physician and surgeon call him near and far, but he was known as a public spirited, progressive citizen, always identified with his means and influence in all forward movements for the public good. Public charities, supporting church organizations and public schools, all received cheerful and generous attention at his hands. He looked upon giving to these objects as a duty and a pleasure, not a burden. He was generous and tender with the poor. No open, needy hand was ever turned away empty, and his skill and strength were never withheld because he could see no fee in his service.

I have always been pleased to look upon him as a physician of the highest type, in many respects ideal.

Educated and progressive, kind, courteous and dignified, sympathetic and loving, he practiced his chosen profession with a rectitude and devotion that the young doctor of to-day may well emulate.

He was thoroughly orthodox in his professional ethics, and no consultant or associate has had cause to complain that he was ever over-reached or discredited by him. He had no tolerance for quackery or professional traffic and chicanery in any form, and he was relentless in his treatment of everything of that sort.

Dr. Gage was a gentleman born and not made. Aristocratic in the true sense of the word, never over-bearing, always affable and polite. Honesty, pure and simple, was one of his cardinal virtues. One might expect that such a cultured gentleman would draw about him exclusively friends and admirers of the wealthy or more favored class, but such was not the case. The rough day laborer on the railroad track and the poor laundry woman, had reserved for them a tender corner in his heart, and the exchange of cheery pleasantries was always enjoyed by both. None kept a closer watch or inquired more anxiously for their friend during his last sickness and suffering than they. He was an ambitious, busy man. Life and his part in it meant much to him and in the great reckoning there will be very few misspent days placed to his discredit.

But the tragedy of every life is inevitable. It may come and surprise us in the flush of health and ambition and without warning, or it may come slowly toward the sunset of life as it did come to our deceased brother.

A good man has gone. No man will rise and say that the world is not better for his having lived in it.

On Bloodless, Operative Epiphyseolysis in the Treatment of Genu valgum adolescentium.—REINER (*Ztschr. f. orthopäd. Chir.*, XI, 2, 1902) proposes to correct genu valgum in cases between the ages of 8 and 17 years by loosening the lower epiphysis of the femur by means of a special apparatus which he has devised. He endeavors to explain away the great objection that growth is thereby disturbed by citing a number of authors and cases, which contradict this fear. Experiments on the dead body showed that the lesion is extracapsular; that displacement is not to be expected as the periosteum remains intact. (G. P. B.)

CURRENT LITERATURE.

MEDICINE.

W. H. Washburn, M.D., Jos. Kahn, M.D., L. F. Jermain, M.D., A. W. Myers, M.D.

Management and Treatment of Typhoid Fever.—EGBERT LE FEVRE, of New York, (*Medical News*, Jan. 2, 1904) gives a somewhat full and "up-to-date" consideration of this most important subject. Good nursing is insisted upon, together with more attention to cleanliness of bed and body, and more care in the disinfection of the urine which contains, in certain stages of the disease, immense numbers of bacilli. The subject of diet is reviewed in the light of recent physiological and clinical studies and the conclusion is reached, that the milk diet does not possess the great value that has hitherto been attached to it. Patients often suffer greatly from a perseverance in this diet, which contains too little carbohydrate and too much fat. Experience has shown that such carbohydrates as oatmeal, rice, wheat, barley, tapioca or sago may be given in bouillon with advantage, and that proteid may be supplied in egg albumin. Gelatin has been underestimated as an article of diet in typhoid fever, and while it cannot replace proteids, it lessens nitrogenous waste and thus protects the proteids of the body. A number of different ways of administering gelatin are suggested.

As to medicinal treatment, he believes that there is a too general fear of cathartics and thinks that salines and castor oil can in many cases be employed with great advantage.

The subject of intestinal antiseptics is also discussed and the routine use of one of the members of this group of drugs is endorsed. The endorsement is not, however, based upon the supposition that the typhoid bacilli in the blood or in the intestinal canal can be destroyed by such drugs. They are advised on the ground that they tend very strongly to prevent the excessive multiplication in the intestinal canal of other micro-organisms, thus lessening the ever-present tendency to putrefaction and fermentation. In the opinion of the author, such drugs lessen the danger of auto-intoxication and as a direct result, lessen the danger of relapse.

For the management of temperature, the external application of cold in some form or other is advocated, and the use of the coal-tar products, especially phenacetin and acetanilid, in moderate doses is defended. Quinine is also endorsed as an antipyretic.

As cardiac stimulants strychnine, nitroglycerine and alcohol are regarded as of great value and power, but care and discrimination are strenuously insisted upon in their administration. (W. H. W.)

The Treatment of the Cardiac Toxemia of Pneumonia.—ELSER (*N. Y. Med. Journal*, Jan. 2, 1904) believes that the prime factor in pneumonia is a toxemia with obstruction in the pulmonary circuit, which leads to cardiac asthenia, degenerative changes in the heart muscle and vasomoter paralysis.

Much of the faulty treatment is due to a failure to recognize the fact that the circulatory disturbances are caused by a vasomotor as well as a cardiac toxemia. Nitroglycerine and veratrum viride, which cause a lowering of the blood pressure, are contraindicated. Digitalis, strychnia and adrenalin should be used. When the cardiac and vasomotor centers show signs of exhaustion and no effect is obtained from strychnia, adrenalin, which acts directly on the heart and blood vessels, should be given hypodermically in fifteen drop doses of the one to one-thousand solution every fifteen minutes.

The diffusible stimulants given at short intervals will often carry the patient over the critical period. Elser uses compound spirits of ether, aromatic spirits of ammonia, spirits of lavender and valerian, fifteen drops each at intervals of fifteen minutes. As an alcoholic stimulant he prefers Tokay wine.

Occasionally, in case of collapse, he finds it necessary to give high rectal injections of coffee and whiskey, hypodermic injections of ether, sterilized oil and camphor, and subcutaneous or intravenous injections of saline solutions.

(J. K.)

Abdominal Pain in Pleurisy and Pneumonia.—HERRICK (*Jour. A. M. A.*, Aug. 29, 1903) points out that the lower six intercostal nerves supply the abdominal wall, as well as a part of the parietal and diaphragmatic pleura, so that an irritation in the course of one of these might readily cause a pain that would be referred to the distribution of this nerve, i. e., to the abdominal wall. Not only may pain of pleural origin be referred to the abdomen, but in their effort to lessen pain and to give the pleura rest the muscles remain quiet and may even be tense, thus simulating more closely abdominal disease.

Irritation or inflammation of the phrenic nerve, which is probably in part sensory, may explain some of the cardiac and gastric disturbances, the halting movements of the diaphragm, as well as the pain referred to the epigastrium and hypochondrium sometimes seen in intrathoracic disease.

Head believes that in certain cases there may be abdominal pain in the epigastric and hypochondriac regions when the lung alone is involved, without the pleura, the connection being through the communicating branches of the sixth, seventh and eighth dorsal nerves which supply the lungs. The author is inclined to agree with this opinion. Illustrative cases are cited.

(A. W. M.)

Treatment of Aneurysm by Subcutaneous Injection of Gelatin.—RANKIN (*Lancet*, July 11, 1903) reports four cases of aortic aneurysm treated by injections of gelatin into the subcutaneous tissues and concludes that with proper precautions the treatment is a safe one; that a marked and speedy decrease in all the subjective and some of the objective symptoms was obtained; that this relief of symptoms is only explainable on the theory of a diminution in pressure-effects from shrinkage in size of the aneurysmal sac; and that the after-histories, as far as obtainable, afforded ground for hope that the beneficial results would be permanent. (A. W. M.)

DERMATOLOGY.

Louis F. Frank, M.D., O. H. Foerster, M.D.

The Present Status of Phototherapy.—FRANK MONTGOMERY (*Jour. of Cutaneous Diseases*, Dec., 1903) two months ago spent several days in the Lysinstitute of Prof. Finsen at Copenhagen, and gives a general resumé of the 800 cases of lupus treated from 1895 to 1901, the status of which was as follows:

1. Cured 412. (a) No recurrence in 2-6 years, 124. (b) Under observation less than two years, 288.
2. Nearly well 192.
3. Under treatment 117. (a) Improved, 91. (b) Little influenced, 26.
4. Treatment discontinued 83. (a) Unsatisfactory result, 16. (b) Died (31) or ill of other diseases, 44. (c) Outside conditions, 23.

In 72 per cent. of the cases the mucous membranes, usually of the nose, were involved. The results are gratifying for, not only is the disease often eradicated, but the resulting scars are little disfiguring, greatly due to the care and precision with which every detail of the technic is carried out. Lupus erythematosus promises better results from phototherapy than have yet been obtained by any other method of treatment. Of 31 cases reported by Finsen there were 11 recoveries, 10 still being under treatment. Drs. Hyde and Ormsby have treated 19 cases, 5 of which recovered (one relapse after four months), 9 showed improvement, 3 but little improvement, 1 discontinued and 1 was made decidedly worse. The most favorable results were in cases in which the vascular element predominated.

Finsen and Forchhammer report 49 cases (with 30 cured) of Alopecia areata. Drs. Hyde and Ormsby have treated 8 cases; in two cases of four months' duration three treatments of twenty minutes each were entirely successful. Two other cases were much improved, but three cases did no better than with ordinary methods.

In rosacea, telangiectasis and vascular naevi phototherapy is an effective treatment. Finsen reports 25 cases with good results in 13; 10 cases of naevi with one cured and 9 improved. Acne, ringworm, indolent ulcers and other inflammatory diseases of the skin have been treated to some extent with apparent success.

Dr. Montgomery speaks highly of the London Hospital lamp with an amperage of 10 or 12 and a voltage of about 55, and states that a fifteen-minute exposure gives the same reaction as an hour's exposure with the original Finsen apparatus. This is especially true in the treatment of superficial lesions. The substitution of iron electrodes in place of carbons has not proved so successful as was expected, its action being more superficial than the London lamp.

Dr. Montgomery arrives at the following conclusions: Of all known methods of treating lupus vulgaris phototherapy is the most certain and gives the best cosmetic results. In small areas results are quickly achieved, in large areas the action of the X-ray is more rapid. Phototherapy is exceedingly valuable in lupus erythematosus, alopecia areata, rosacea and vascular naevi, but the time of observation is too limited to demonstrate its advantages over other modes of treatment. (L. F. F.)

A post-syphilitic sign hitherto undescribed.—G. NOBL (*Wiener klin. Wochenschr.*, No. 42, 1903) examined 150 syphilitic males in whom the infection dated back at least two years, and found that of these 18 per cent., in whom there had been no manifestation of syphilis for periods varying from two to twenty years, showed a peculiar atrophic lesion of the scrotal skin. Although this has probably been observed before, Nobl thinks its significance as a sign of previous syphilis is not sufficiently appreciated. He describes it as a faceted appearance of the skin of the scrotum, with grouping into circles and segments of circles, resulting in very delicate, circinate tracings with the gloss of satin, often perceptible only in reflected light. These slightly depressed and sharply marginated areas are found especially on the anterior and lateral scrotal surface, and are each composed of pin-head sized and larger, polygonal, flat, shiny shields, at the edges of which the uninterrupted normal furrowing of the skin appears. The areas have an atrophic feel, are bluish-gray in color, and disappear completely when the skin is stretched. The condition bears no resemblance to any other disease of the skin, and does not undergo involution either spontaneously or as the result of treatment, but persists unaltered.

Microscopic examination shows that the papillary body, containing remains of the specific infiltrate, is shrunken, and that the flattened germinal layer has undergone atrophic changes. The pathogenesis of circinate scrotal atrophy is, therefore, based upon previous irritative tissue lesions, and coincides with the clinical observation in many instances, during early stages of the disease, of small papular, grouped eruptions on the scrotum, or with the presence, though not demonstrable, of grouped scrotal infiltrates, which years afterward undergo involution and become manifest as circinate scrotal atrophy.

(O. H. F.)

Some Observations on the Use of Roentgen Rays in Dermatology.—HENRY STELWAGON (*Journal of Cutaneous Diseases*, August, 1903) after giving a general review of the history of the X-Ray, its embodiment into dermatological therapeutics and the methods of application, chronicles his experience as to its therapeutic value in the treatment of dermatoses. Two extensive cases of lupus vulgaris have slowly but steadily improved; one case of scrofuloderma was cured by twenty exposures without production of X-ray erythema. A striking case of tuberculosis involving the nose and adjacent parts was gratifyingly acted upon by the treatment. Four cases of lupus erythematosus were treated, one of which was almost completely cured, whereas two showed a steady and decided improvement; in the remaining case there was no positive result whatever.

In acne the treatment has been generally found useful, especially in the sluggish and indurated type. The result was most satisfactory when treatment was pushed to a point of erythema. Acne rosacea was influenced equally as well with varying results, the hypertrophic forms and those connected with oily seborrhoea giving best results.

In psoriasis the author has found the X-ray useful in rebellious cases involving much surface but only when treatment was carried to the extent of a slight erythema.

The author's experience in eczema has been a moderate one, but the results are promising. The cases treated were of a persistent and recurring type,

involving the hands, and sluggish forms situated upon the lower leg, ankle and foot. Some cases were benefited, a few apparently cured and others practically uninfluenced. In keratosis of the palms, the Roentgen ray exerts a most decisively beneficial influence. Accidentally a favorable influence of the X-ray on local hyperidrosis was discovered, a few cases favorably acted upon being cited. The author believes that in the X-ray we possess a potent remedy in some cutaneous diseases, especially in some of the epitheliomata, lupus, scrofuloderma, and lupus erythematosus.

In acne vulgaris of the stubborn type and acne rosacea, the results are often brilliant, as also in the condition of keratosis of the palms and soles. Although the writer looks upon the X-ray as a very valuable addition to therapeutics, he is reserved regarding the brilliant results claimed by many experimenters. (L. F.)

Acute Contagious Pemphigus in the Newly Born.— GEO. J. MAGUIRE (*Brit. Jour. of Dermat.*, Dec., 1903) gives details of an epidemic of pemphigus acutus neonatorum, due to infection with the staphylococcus pyogenes aureus, all the cases occurring in the practice of a certain midwife. Of eighteen infants affected eight died. Though appearing chiefly in the newly born, and only fatal to these, the disease also attacked older children and adults. It was characterized by a bullous eruption on the skin, variable in distribution and extent, the specific micro-organism being found in the contents of the vesicles. In many of the cases no symptoms other than the skin eruption were manifested, but a certain group of cases showed grave symptoms of a general infection, and invariably ended fatally. The point at which the systemic invasion arose in these fatal cases was the unhealed umbilical scar. Treatment had little or no effect upon the course and duration of the disease, whatever the result.

H. G. ADAMSON (*ibid.*) reviews the recent literature on pemphigus neonatorum and concludes that this disease is an infantile form of impetigo contagiosa (Tilbury Fox), that the phlyctenular impetigo is due to a streptococcic infection, and that observers who have described the staphylococcus pyogenes aureus as the infective agent in pemphigus neonatorum have been concerned with a secondary infection, and that investigation by special culture methods will discover the streptococcus pyogenes as the primary cause. (O. H. F.)

PATHOLOGY AND BACTERIOLOGY.

Albert G. Jonner, M.D.

On the Destruction of Bacteria in Vaccine Pulp with Potassium Cyanid.— GAYLORD AND WHEELER (*Am. Med.*, Aug. 29, 1903). The work of Loeb, who found that the delicate protoplasm of the sea urchin's eggs could withstand the action of an n/400 KCN solution and still develop into swimming larvæ, and of Gorham, who found that the number of bacteria in sea water are diminished when exposed to the action of potassium cyanid, led the authors to investigate the action of this chemical on the bacteria found in vaccine with the hope of finding here a ready and accurate bactericide. The pulp used in the experiments was allowed to undergo decomposition and contamination and was then treated with varying strengths of KCN solution,

beginning with n/2000 and extending to n/200. Pulp treated with a physiological salt solution was the control test. In every case children were vaccinated successfully with the vaccine pulp so treated, showing that the efficiency of the vaccine was undisturbed. Tables published show that a solution of n/200 KCN exerts a complete bactericidal action upon the vaccine without in any way injuring the specific organism, and its application strongly suggests that the organism of vaccine partakes of the nature of animal protoplasm and is a protozoon. KCN, though an active poison, is so volatile that all traces of it can be removed by placing the solution in a vacuum pan at 36° C.

On the Condition of the Blood in Rheumatoid Arthritis and Osteo-Arthritis.— WILLIAM G. IRVING (*Amer. Med.*, Sept. 12, 1903) finds the "anemia" of these diseases deduced largely from the general clinical conditions manifest, rather than from any scientific investigation of the blood itself. He publishes a preliminary report of forty cases finding the red blood-corpuscle count ranging slightly above normal while the hemoglobin percentage is close to 100. This condition he found to be present both in the robust cases with the acute osteo-arthritic symptoms of but a few weeks standing, as well as in the chronic cases with a more or less general rheumatoid arthritic involvement. A slight leucocytosis found, bears no relation to the severity or duration of the disease. The differential leucocyte count shows only little variation in percentages from the normal, *i. e.*, slight increase of the polymorphonuclear and increase of the mononuclear elements. No abnormal elements were found. The conditions of the blood are not such as would be expected in diseases of such a general wasting nature.

Bacterial Findings in the Normal Male Urethra and the "Syphilis Bacillus" of Max Joseph.— H. PFEIFFER (*Wiener Klin. Woch.*, No. 26, 1903) found constantly present in the normal urethra a saprophytic bacillus belonging to the diphtheria group in eleven cases out of fifteen examined. In examining the urethræ of twelve cases of gonorrhea he found the organism six times. In its principal characteristics this bacillus corresponded, particularly tincturally and culturally, with the recently described Joseph-Piorkowski syphilis bacillus. Pfeiffer does not believe this latter bacterium to be the specific cause of syphilis.

On Congenital Wry Neck.— MAAS (*Ztschr. f. orthopäd. Chir.*, XI, 2. 1902) states that he is of the opinion that the intrauterine causation of the deformity is rare, and inclines to the view that it is caused chiefly by an ischemic necrosis of the muscle following great stretching. In 40 cases occurring in his practice he had 28 pelvic presentations with forceps delivery. (G. P. B.)

THERAPEUTIC NOTES.

A REMARKABLE CURE OF A REMARKABLE CASE.,

BY G. H. F. HOUSE, M. D.,
Ex-President of Indianapolis Board of Health,
INDIANAPOLIS, IND.

I have just had such a remarkable cure of a case that I feel it my duty to report it. Nov. 20, 1903, I was called to see Mr. B., age 73 years; kidneys congested; bladder irritable; only one ounce of urine passed in thirty-six hours; both legs three times their normal size; abdomen full of water; heart action bad; difficult breathing. Tested urine, but found no albumen; urine full of pus, blood, urates and phosphates. Put him on Sanmetto and digitalis; punctured the legs (and they have dripped gallons of water—thought he would die). After six days, slight improvement. Kept up treatment, and at this date, Jan. 13, 1904, the swelling is gone and the breathing easy, urine nearly normal, appetite good, and almost well. He is now on the eighth bottle of Sanmetto. It is the most remarkable recovery I have had in twenty-seven years' experience, and I am compelled to give Sanmetto the praise. It is a grand medicine.

3015 N. ILLINOIS ST.

Dr. Colin Campbell, Southport, Eng., L.C.R.P., M.C.R.S., writes in the *Medical Press and Circular*, London, Eng., Oct. 7, 1903:

PLEURISY.—Dr. B. was under my care last winter suffering from a pulmonary cavity. He had had previously two or three intercurrent attacks of pleurisy, which I again found present on Dec. 7, 1902, accompanied by severe pain over the cavity, and a temperature of 103 degrees. His previous attacks had occurred at his home, where careful poulticing was practicable, but in apartments this was unsatisfactory, and so it occurred to me to try Antiphlogistine.

The material was warmed and "trowelled" on for many inches around the pleuritic center, then covered with non-absorbent lint and Jaconet.

The result was remarkable; the pain disappeared within an hour, and the high temperature within two days.

Many advantages over poulticing were noticed by the patient; facility of application, no unendurable heat, rapid relief from pain, its adhesiveness rendered movement possible without tight bandages or the alternative sudden influx of cold air which follows the separation of a poultice from the skin.

CHILBLAINS to many will appear a trifling matter, but as one whose school days in winter were rendered miserable by them, I can assert that they are most maddening. Last winter my daughter, *aet.* 11, suffered from them severely. Each time Antiphlogistine was applied, the redness and intolerable itching disappeared in a night. I have tried remedies innumerable with no such result.

"Many a man is to-day worrying over a case or two of pneumonia, pleurisy, or capillary bronchitis, whose troubles would flit away like mist did he but know enough to put his patient into a jacket of Antiphlogistine."—*Medical Summary*, Nov., 1902.

Tyree's Antiseptic Versus Bichloride, Carbolic, etc. None of the objections to corrosive sublimate, carbolic acid and other agents of this class—namely toxicity, chemical union with albumin, superficial effect only, change to inert compounds, corrosive action upon tissues, harm to metal instruments, injury to the hands, etc., prominent in medical literature are experienced in the use of Tyree's Antiseptic Powder.

Scores of leading specialists and general practitioners, at home and abroad, are employing Tyree's Antiseptic Powder because they find it efficient, convenient, economic; of general utility; without injurious effects, immediate or remote, local or constitutional; healing as well as antiseptic and germicidal. and equally well suited for use by patient as by medical attendant.

One part in fifty of water, or small quantities, is rapidly germicidal to the most resistent bacteria. Weaker solutions are still valuable antiseptics. That makes Tyree's Antiseptic Powder highly economic. One ounce, cost not over ten cents, prepares one gallon of standard antiseptic solution, for injections, washes, douches, sprays, etc.

Tyree's Antiseptic Powder was prepared originally to treat diseases of the genital mucous membrane, not to displace older antiseptics. The latter it has, however, already done in the practices of thousands of American physicians and surgeons, owing to its superior efficacy, general utility and absolutely safety.

As was to be expected Tyree's Antiseptic Powder has imitations. Only worthless articles escape the schemes of counterfeiters. It is important to use only the genuine, therefore insist always upon obtaining original packages.

A sample of this valuable preparation will be furnished nurses free of charge upon application to Mr. J. S. Tyree, chemist, at Washington, D. C.

That it is a good policy for any person to adopt the use of a stimulant, regardless of the actual need for the same, is a question which hardly admits of discussion. However, when the body demands additional aid to overcome unhealthful, energy-destroying conditions, the use of a sustaining tonic is absolutely necessary to maintain any degree of health.

Whipping and spurring the body on to greater efforts is not conducive to satisfactory results. Rather it must be urged and persuaded to do its best.

While the iron and herb tonics have their place, and are, to an extent, useful, they are lacking in the bracing and substantial toning effects which are so much sought for.

On the other hand, the malt tonics contain the properties which build up and strengthen the resisting power of the body. The maltine is an easily assimilated food, which, aided by the diastase which converts the starch into dextrine and sugar, forms a substantial and nourishing combination. The salts of malt, especially the phosphates, are food for the nerve tissues, and by their absorption into the blood, assure good stimulation and nerve tone. The hops found in combination with most malt extracts also have decided toning qualities. Their slight but agreeable bitterness induces an ideal stomachic and diuretic action.

Because they combine with the stimulating effects; the food and digestive power of the maltine and diastase, malt extracts, prepared from pure clean malt by late improved methods of manufacture, make a desirable and true tonic.

THE WISCONSIN
MEDICAL JOURNAL

MARCH, 1904

SPINA BIFIDA.*

BY H. REINEKING, M. D.,

Professor of Surgery and Clinical Surgery, Wisconsin College of Physicians and Surgeons.

MILWAUKEE.

As a basis and introduction for my remarks I will report the following cases which have not heretofore been put on record:

Case 1. *Double spina bifida; excision of the upper and injection of the lower tumor; recovery; cure.*

Male; at time of first examination thirteen months old; trunk and extremities large and well developed; head strikingly large and presenting the appearance of a moderate, but distinct degree of hydrocephalus; anterior and posterior fontanelles patulous, the former to the extent of one and one-half inches, with a gap fully one-half inch in width along the line of the sagittal suture. In the median line of the upper dorsal region a fluctuating tumor, of oval shape, measuring four inches in the longitudinal and three in the transverse axis of the body, and projecting two to two and one-half inches above the plane of the surrounding skin. Throughout the greater part of its extent the covering of the tumor consisted of a very thin, glistening, translucent, almost transparent membrane, gradually thickening towards the margin and merging into a zone of healthy skin at the circumference of the tumor. Compression of this tumor could be plainly felt to increase the pressure of the fluid at the fontanelles and vica versa, pressure over the cranium increased the tension of the tumor. No umbilication, longitudinal thickening or furrowing of its posterior wall could be detected.

In the upper sacral region there was a second tumor, smaller than the upper, its base measuring about one and one-half inches in both

*Read by invitation before the Medical Society of Milwaukee County, Nov. 20, 1903.

dimensions, and completely covered by skin. Its depth or projection above the level of the surrounding skin was about one inch.

In the case of neither tumor could any bony ridges or prominences be detected along their margins.

Muscular power, sensation and voluntary control of the upper extremities were normal. In the lower extremities the power of motion was very limited, no weight whatever could be sustained by the legs, and while sensation in these parts appeared to be normal, the child crying out when pricked or tickled, the motor response was limited and slow. There was no apparent deficiency in the innervation of the bladder or rectum. The child's intellect, so far as could be determined at this early age, showed no deficiency; the general health had been good since birth; there was no history of convulsions.

Since the birth of the child the tumor had grown very perceptibly and was now very tense, with a corresponding fullness at the cranial defects, and it was decided to make an attempt to check its growth by repeated aspirations. These were made by means of an aspirating syringe so constructed as to obviate the necessity of withdrawing or detaching the needle to expel the contents of the barrel and to guard against the injection of air into the tumor. In order to prevent leakage the needle was inserted through the skin-covered margin and in such a way as to traverse considerable tissue. From six to twelve ounces of clear cerebro-spinal fluid were withdrawn at a sitting, and the treatment repeated every forty-eight hours until nine aspirations had been performed. The immediate result was a marked relaxation of the tumor wall, with great depression of the soft coverings of the brain at the fontanelles. The general effects were marked somnolence and indifference as to nourishment. After twenty-four hours these conditions would disappear, and the child return to its ordinary condition, but the fluid would re-accumulate so as to reach the former tension within forty-eight hours after the treatment. After the ninth aspiration, probably owing to some lapse in the antiseptic precautions, a severe febrile reaction ensued, the temperature rapidly reaching 104°, with slight opisthotonos, marked somnolence, and turbidity of the cerebro-spinal fluid, but no convulsions. Although complete recovery followed within five or six days, I decided to abandon this treatment as too dangerous.

Three months later the upper tumor was excised and the lower one injected with one fluid dram of Morton's fluid. (Iodine 10 gr., potass. iodid 30 gr., glycerine 1 fl. oz.). The upper tumor was found to be a pure meningocele with a small neck, and the bony defect was small, so that the operation resolved itself simply into the excision of the sac, ligation of its neck and careful closure of the aponeurotic structures and skin. There was no leakage, and complete primary union followed.

The effect on the smaller tumor of the iodine injection was all that could have been desired, as the single treatment sufficed to bring about its complete obliteration, so that after a few weeks nothing but a small mass of ruffled skin was left to indicate its former location.

The subsequent history of the boy, to the present time, has been as follows: Improvement in the muscular power of the lower extremities was noticed within a few weeks after the operation, and increased steadily, so that after a few months he could bear some weight upon his legs, then began to support himself in a walking chair, and by the end of his sixth year was able to walk alone. He is now over ten years old, goes to school, and is intellectually rather ahead of other children of his age. He began to talk when eighteen months old. His father writes me that he is somewhat flat-footed and weak in the ankles; the muscular strength in his lower extremities does not compare with that of other children, he gets tired and falls easily, and cannot walk very fast or run like other children. Sensation appears to be normal; there is no weakness of bladder or bowel. The size of his head has not increased in proportion to the growth of the rest of the body; though still somewhat out of proportion, it is not nearly so much so as during the earlier years of his life.

Case 2. *Meningocele; multiple aspirations; meningitis; death.* Male, seven weeks old, with large, very thin-walled tumor in upper sacral and lower lumbar region, its base covering an oval area of about two by three inches. The wall of this tumor showed no umbilication or other indication of a participation of parts of the cord in the makeup of its posterior wall; the latter bulged strongly, owing to its thinness and severe tension. At the base of the tumor a narrow margin of skin reinforced its wall. Talipes varus of the left foot was present.

As the tumor was increasing in size, and it was desired to postpone a radical operation until the child should become stronger, multiple aspirations were begun with a view to preventing the further growth or distension of the cyst. Twenty-seven aspirations were made at intervals of forty-eight hours, in the manner and with the immediate effects described in the preceding case. The amounts withdrawn varied from four to ten ounces. During the course of this treatment the child increased in weight, and while the sac usually refilled promptly within forty-eight hours, some shrinkage in its size could be noticed. After the twenty-seventh injection, however, meningitis suddenly developed, the fluid became turbid, convulsions set in, and death ensued within forty-eight hours, the child having reached the age of four months.

Case 3. *Myelo-meningocele with very broad defect of bone; complete absence of motion and sensation below level of tumor; operation refused.*

Female, four years and eight months old when brought to me for examination; general health good since birth; when four years old had scarlet fever, followed by complete recovery; has never had convulsions; began to talk at same age as other children of the family; speaks with remarkable clearness for a child of her age and is mentally perfectly bright. The head is strikingly large; the cranial bones fully ossified; the trunk and extremities large, and, except for

the deformities to be described, well developed; the entire body markedly obese, owing no doubt largely to the inability to take active exercise. Both feet show well-marked talipes equino-varus.

The tumor in this case occupies the lumbar and upper sacral region, covering an area three by three and one-half inches, protruding about one and one-half inches at its most prominent portions; beneath each lateral margin an irregular bony ridge could be distinctly felt, indicating a cleft, about two inches in width, in the posterior arch of the spinal canal. Its posterior wall consists of skin and membranes, irregularly disposed and of considerable thickness; the tension was slight and the tumor wall rather flabby. Indistinct umbilication at the upper median portion and a thickening and furrowing running longitudinally a little to the left of the median line were noticed; a portion of the right side was covered with short, dark hair. The father states that the tumor has increased but slightly since the birth of the child, and that during the last six or seven months he has clearly noticed a decrease in its prominence.

The most interesting and important feature of this case, however, was the presence of absolute paralysis of motion and sensation, and the total absence of electric excitability and contractility of the muscles below a plane corresponding to the distribution of the spinal nerve emerging at or just above the upper part of the tumor, in other words, affecting both lower extremities and the lower portion of the abdominal wall and back. Never since the birth of the child had the slightest active movement been observed in its lower extremities; twice she had sustained severe burns about the feet without showing the slightest evidence of suffering; tactile sense, too, was entirely absent. The child never expressed a desire to empty its bladder or rectum; when placed on the vessel at regular intervals she would perform these functions, and if not, she would soil her clothing without apparently taking any cognizance of what happened.

Operative treatment in this case was refused on the following grounds: the tumor of itself was causing no inconvenience; it was diminishing in size and its coverings were such as to make rupture at any future time very improbable; the local conditions were unfavorable for a successful operation, as the posterior wall gave indications of involving portions of the cord and spinal nerves; the bony defect was so wide and the margin of healthy skin so narrow, that the possibility of effectual closure and primary union was more than doubtful. As to the paralysis, no improvement could be looked for in a case of such gravity and of so long standing; such paralyses must be regarded as irreparable. There would, therefore, have been no justification for subjecting this case to any operative risk, which, with the local conditions here present, was considerable.

I shall forego all discussion of the etiology, varieties, pathological anatomy and symptomatology of the condition under consideration, and limit my remarks to certain phases of the question of operative treatment, more especially its indications and contraindications, and

if my conclusions shall be found to be somewhat at variance with the generally accepted dicta of the text-books and other recent publications, I hope to convince you that they are in perfect accord with advanced surgical thought, with humane principles, and with the lessons inculcated by a study of the foregoing cases. The discussion will furthermore be limited to cases of meningocele and meningomyelocele, as spina bifida occulta is rarely recognized or requires no treatment, while the subjects of myelocele (cases in which all coverings of the cord—skin, bone, dura and arachnoid—are defective), and of syringomyelocele or syringocele (tumor formed by distension of the central canal of the cord), generally live but a short time and are absolutely inoperable.

Now, I believe it to be sound doctrine that curative measures should not be withheld from these unfortunates in any case in which we can expect, with reasonable safety, either to remove the burdensome deformity, thereby relieving the patient of the inconvenience it causes and obviating the danger of rupture and other complications, or in which we can add, even to a small extent, to their comfort and make them less burdensome to those who have the responsibility of their care—unless there are present contraindications of sufficient weight to deter us from the attempt.

When, therefore, surgical authorities apparently agree in accepting as a good and sufficient contraindication to the operative treatment of spina bifida the presence of hydrocephalus or of paraplegia, it would seem proper to call attention to the following considerations: Is it not a fact, as illustrated in my first case, that in a certain proportion of cases a moderate degree of hydrocephalus, manifesting itself in early infancy, gradually disappears as the child develops, in other words, is outgrown, as it were? I recall several such cases in which my fears of a defective development of the mental powers were happily dispelled by the more proportionate physical and perfect mental development of the child after passing the period of earliest infancy. But even if they should be unfortunate enough to grow up as mental defectives, would this constitute a valid reason why they should be allowed to carry the additional burden of a growing, more or less dangerous, and (to the attendants at least) loathsome tumor in a locality where it is certain to cause more or less inconvenience? Are not these helpless human beings entitled to every degree of relief and comfort we can afford them, even though the cure cannot be complete or the results brilliant? It has been my experience that wounds heal as readily in the idiotic and insane as in any other class of patients, and the

difficulties as to after-treatment, cleanliness, etc., can all be overcome. As a valid contraindication I would consider, however, the association with hydrocephalus of confirmed or frequent attacks of convulsions of cerebral origin.

What has been said in regard to hydrocephalus holds good to a large extent of paraplegia. It may be doubted whether either condition—hydrocephalus or paraplegia—is ever improved as a direct result of operation; possibly the improvement, if present, is only the natural consequence of the general gain in the child's development and strength, though we can readily understand how, by the removal of a considerable area of secreting membrane, abnormal at that, the secretion of cerebrospinal fluid might become lessened, and how, by the liberation of portions of the spinal cord and nerves and the relief of abnormal pressure, paraplegic conditions might be caused to disappear. Experience shows that, with some power of voluntary motion present in the lower extremities, gradual improvement does usually ensue after removal of the tumor. But even were this not to be expected, would that be a valid objection to the removal of the inconvenience and deformity caused by the spinal tumor? It is stated that in a few instances hydrocephalus has been observed to develop after operation on the spinal tumor. It is certainly difficult to see any causative relation between the two, and the true explanation may be that a degree of hydrocephalus existed before operation and simply became more manifest at a later period.

Granting, then, that these conditions alone and of themselves should not deter the surgeon from attempting such operative relief as may be possible in a given case, would I advise operation in every case? By no means. There are several conditions under which surgical treatment would not be justifiable, and these I will now briefly discuss:

1. When the tumor is very small, diminishing in size, or at a standstill, is causing the individual little or no inconvenience, and its coverings are such as to make a rupture improbable. In such cases no operation should be performed unless in the judgment of the surgeon a co-existing paraplegia could be improved thereby.

2. When the local conditions are such that a firm closure of the defect and primary union cannot be expected. This is a matter which must be left largely to the good judgment and resourcefulness of the surgeon. The fear of primary infection will no longer deter him from operating; it is different, however, when leakage of cerebrospinal fluid with its attendant danger of infection are likely to follow. As a rule

the surgeon should assure himself of the possibility of perfect closure before deciding to operate, but in the presence of urgent indication for operative interference he may trust to the success of extensive plastic methods to accomplish his end.

3. When there is a confirmed tendency to convulsions of clearly cerebral origin. In these cases the immediate outcome of an operation is so uncertain as to make its performance extremely inadvisable.

4. When, owing to the patient's general condition or some coexisting local condition, any operative procedure would involve great and immediate danger to life.

5. If, in operating on a meningomyelocele, it should be found that the nerve elements and portions of the cord cannot be safely separated from the posterior wall of the sac, the operation should be abandoned and the wound sutured at once. (Abbe, International Clinics.)

The sphere of usefulness of Morton's method of iodine injections is well illustrated in the instance above related, *viz.*, small tumors, with a covering of fairly healthy skin. Many cases are reported to have been successfully treated by this method. Its mortality, so far as can be determined, is, however, slightly higher than that of excision. Its dangers are readily understood and it is doubtful whether its performance ought to be recommended in any case in which excision is practicable.

Aspiration can be permitted only for the purpose of retarding the growth or preventing threatened rupture of the tumor, when coexisting conditions forbid immediate or future operation. While in both of my cases infection occurred, I believe that this was due to faulty work, and that with the strictest antiseptic precautions possible these accidents could have been avoided. If twenty-six successive aspirations can be made without getting infection, it stands to reason that its occurrence after the twenty-seventh was due to some error, and, therefore, could have been avoided.

THE DEPURATIVE FUNCTION.*

BY ROBERT CURTIS BROWN, M. D.,
MILWAUKEE.

In this paper I wish to speak of those phenomena which take place in the body when it is attacked by a pathogenic agent, which we speak of as depurative or protective.

Nature has certain means of guarding herself against infection and a way of her own of fighting disease. The study of nature's methods in resisting disease has opened a very wide and most interesting field of research, the importance of which can be readily appreciated when we think of the marvelous discoveries that have been made in that particular branch of it which we call immunity. If we trace back the origin of this protective function we find that it was one of the original properties of the simple cell. In the natural course of development it has been acquired by the organ and is a function of all organs. It is also a property of the body as a whole, taking the shape of the natural instinct of self-preservation.

If we agree with Darwin, Haeckel and other great authorities on evolution we must believe that all life was in the beginning a simple cell. An organ consists of a group of cells that have become more or less specialized to perform certain functions. At first the simple cell which rose by reproduction from the oldest parent cells must have lived in an isolated condition, each one performing the same functions as if it were an independent organism; nutrition, reproduction, self-protection. Later, isolated cells gathered into communities. Groups of cells that had arisen from the continued division of the simple cell remained together and now began to perform different offices in life. The first traces of specialization occurred when one group assumed one office and another another. One set of cells devoted itself to the absorption of food, another to reproduction, still another set busied itself mainly in the protection of the body. Thus we had formed in the body organs devoted to nutrition, to reproduction, and to self-preservation. Yet each individual cell did not lose its own power of nutrition or of reproduction or of self-protection. The cell, indeed, acts independently, but the nearer the cell approaches the simple cell or egg-cell (examples of which are the embryonic cells and blood cells) the more does it seem to act as an independent organism, and the more evident are its functions. In the cells of later develop-

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 5, 1903.

ment, such as the complex nerve cells, these functions are not so evident. The organs also which were developed from groups of cells—when these assumed their special functions—did not entirely lose the hereditary function of protection.

The process of inflammation is nature's response to the action of outside pathogenic agents. These responsive phenomena which make up the symptoms of disease are really protective in their inception. They are but the normal functions of the body exaggerated in proportion to the virulence of the pathogenic cause. It is a fact that nature, though she begins well, does not seem to know when to stop, and that the inflammation which was commenced for the purpose of limiting and overcoming the pathogenic cause, is carried too far and becomes a menace to the body. Nature does not take into account the locality of the inflammation, an edema, depurative in its intention, may do little injury on the hand, while it would be very serious in the glottis, likewise an inflammation of the finger would be of little importance, though the same protective action in the appendix would endanger the patient's life.

The depurative function of the blood, as shown by its ability to destroy bacteria, and the subject of immunity, I can but mention. Immunity is a property which the cell acquires by education and is transmitted to its descendants. It is usually spoken of as belonging to the blood cells, but I think it is a property of all cells, at least all simple cells. As all cells inherit some depurative function, so also do they inherit this result of a depurative function, namely, immunity against disease.

As we have seen in the development of the organ, that it retained other functions than its specialized one, so we find that the functions of organs are complex and not simple. The skin both absorbs and excretes; besides acting as a protective to the body and regulating its temperature; it is one of the most valuable eliminating organs. The lungs in addition to their well known function of providing the blood with oxygen, eliminate some of the waste products of the body. In disease many of the products of pathogenic agents are excreted by the lungs. The liver has many functions other than that of bile making; urea is principally made in the liver, it is the seat of the glycogenic, the bloodmaking, and most important of all, the depurative function. It has been estimated that at least half the known poisons are arrested or destroyed by the liver, thus protecting the body from them. The toxins of pathogenic bacteria as well as the waste products of the body are arrested by the

liver or modified into substances that can be eliminated by other organs. Other examples might be mentioned, but enough have been given to show that the functions of organs are complex, and that the depurative function is a property of many.

The various organs that aid in protecting the body are assisted in their work by the lymphatic, the circulatory and the nervous system. Each little lymph node acts as a barrier to the invasion of infection. Indeed, the main function of the lymphatic system is protective, and it is quite probable that depuration is the main function of what we call the ductless glands which are mainly composed of lymph tissue. Wherever the body is especially exposed to infection we find an abundance of lymph tissue.

The circulatory apparatus brings up nutriment to the resisting cells, carries away the dead matter and provides new fighting material in the shape of the leucocytes and the blood cells. The bactericidal action of the blood serum is well known. The blood takes the toxins to the depurative organs, such as the liver and spleen, and, finally brings the modified toxins to the eliminating organs, the skin, lungs and kidneys, etc., where they are eventually excreted. The nervous system has its work to do. By means of the sensitive peripheral nerve endings the fact of invasion by a pathogenic agent is conveyed to the central nervous system, and reflexly, the different functions by which the body protects itself are set in operation. Through the nervous system, mistakes in the depurative function are liable to happen; this is well shown in the etiology of colds. There is no doubt that the congestion and increased secretion are nature's methods of overcoming and washing away an offending microbe. Yet this same depurative process may be brought about, and a person suffer the symptoms of a cold when the microbe is not present, for instance by the exposure of sensitive skin areas to a draught.

That the body as a whole is prepared to resist the invasion of pathogenic agents is shown by the manner in which the natural openings of the body are guarded. For example, let us take the entrance to the respiratory tract: there is hair in the nostrils, and the mucous membrane is so arranged that it presents the largest amount of moist surface to entrap microbes; that it does this well is proved by the fact that expired air is free from bacteria. The tonsils are a part of a ring of adenoid tissue that guards the respiratory apparatus from infection. It is an interesting question as to whether the disease we call follicular tonsillitis is not an example of nature's depurative function. We know that tonsillitis is not caused by a specific microbe, but that

a great many different microbes may cause it. It is possible that the infection, if not too virulent, is overcome by the tonsil without any symptoms whatever, but if the infection is more virulent the depurative function is taxed further, the lymph cells in the crypts are multiplied and the characteristic exudation is secreted. I believe it possible, for instance, for a Klebs-Loeffler bacillus to set up the phenomena of a follicular tonsillitis, the clinical symptoms of diphtheria not being present at all. In the same way the pathogenic agent causing scarlet fever may cause a tonsillitis in other members of a patient's family, or in the attending nurses. Peyer's patches in the intestine are analogous to the tonsils in structure and are probably analogous to them in function, indeed, all tissue that is made up of lymphoid material is especially protective in its function. The spleen is composed of lymph tissue and though its function is not well understood, it is probably mainly depurative.

The skin, the lungs, the kidneys and the intestines are the organs by which the body finally eliminates waste products in health and toxic material in disease. As we have said before, the phenomena that take place in disease are but an exaggeration of the normal functions of health. In one disease an eliminating organ may be taxed more than another. In the exanthemata the rashes are evidence that toxic material is being eliminated by the skin. In scarlet fever the kidney is very apt to be overworked. In measles the mucous membrane of the respiratory tract eliminates a good deal of toxin and I believe that accounts more for the cough than that the inflammation is an extension from the primary infection in the throat. In the diarrheal diseases the intestine, of course, eliminates most of the toxins. I saw recently an interesting case of ptomaine poisoning in which there was diarrhea, an extensive urticaria, and in addition asthma, showing well the organs that were concerned in the elimination of the poison.

When the depurative function of an organ is interfered with the body suffers. For example, attacks of migraine and what we call, for lack of a better name, rheumatism—not that infectious variety, but the muscular rheumatism and arthritis we see in patients of a lithemic diathesis—vary considerably with the humidity of the atmosphere. The skin does not act well when there is much moisture in the atmosphere and the toxic material that should be eliminated by it remains in the blood, causing in some patients migraine; in others this toxic matter is deposited in the muscles and joints, causing so-called rheumatism.

The importance of considering the depurative function in studying the etiology of a disease cannot be overestimated; take, for in-

stance, cirrhosis of the liver. Could it not be traced to an overtaxing of the liver's depurative function? Cirrhosis is especially common in those patients whose livers have had to contend with other poisons than the natural waste products of the body, such as alcohol and lead. When inflammation which we have seen is depurative in its incept, goes too far, connective tissue takes the place of the normal cells. Nephritis could be advantageously studied in a like manner. It is quite possible that the arteriosclerosis of old age and its attendant disasters may be due to the continued resistance of the cells lining the blood vessels to the natural waste products of the body.

In the treatment of disease a consideration of the depurative function is of great importance. The art of the physician should not be directed so much to the combating of symptoms as it should be to the assisting of nature in her protective efforts. As we have said before, nature, though she begins well, often goes too far, and here it is that the judgment and aid of a physician is very necessary. As the best work of the surgeon is where he removes the offending cause from the body and thus relieves nature in her efforts, the best results of the physician are shown where he applies those methods and gives those remedies that assist nature in elimination.

SURGICAL PROGRESS.*

BY W. H. EARLES, B. Sc., M. D.,
MILWAUKEE.

The road to progress leads primarily along the lines of the ideal, or rather in the direction of the ideal, for the lines may be tortuous. Many times, before we even approximate the nearest approach to the ideal attained by man, we find it necessary, in the interests of the practical, to retrace our foot-steps along well-defined professional paths, and search for truth in the labyrinths of conjecture, which mystify us at every step. It is, however, by these attempts and retracings that fixed and permanent progress is made. In the domain of surgery, progress is not synonymous with a creation or performance of new things, but embraces in addition thereto, the broader proposition of doing old things better and leaving many unnecessary things

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 5, 1903.

undone. Time and opportunity, the great essentials of all evolutionary progress, coupled with a desire for scientific advancement, have, we believe, during the last few years, added much in the way of gain to the field of surgery.

Generally speaking, the current surgical literature of the day gives evidence of a broader comprehension and a clearer conception of the subjects treated than were wont to appear in the past. This implies a closer study of causes and effects, and the consequent establishment of more careful diagnoses and more rational methods of treatment.

Unwise operative work is being emphatically discountenanced by those high in the councils of our calling, and a healthy conservatism has supplanted pernicious experiment. A closer study and more thorough knowledge of the pathology of surgical manifestations has substituted light for darkness and confidence for doubt. The simplification of technic—still only in the comparative degree—has resulted in more approved methods of practice, and in better clinical results. The improved pre- and post-operative treatment of patients so noticeable in the surgical work of to-day, cannot be regarded in any other light than that of a great advance.

In brief and in general we believe we are warranted in concluding that in all departments of surgery, and in every detail of each department, a fuller knowledge of the subject as well as a clearer conception of the necessities of the situations, have become established.

Speaking more specifically, we invite your attention to a few of the especially advanced efforts which seem to be entitled to serious consideration. The treatment of vascular tumors by the injection of boiling water, opens a not very limited field for study and possible usefulness. The claim is made by no less an authority than John A. Wyeth that this practice is efficient in a certain class of patients not amenable to any other plan of treatment. It is claimed that the circulation is arrested in the aforesaid parts by coagulation of the blood and albuminoids, through the influence of the boiling injections, and that disappearance of the tumor follows through absorption and granular metamorphosis. This theory has certainly the merit of plausibility, and when supported by the authority referred to, is entitled to respectful consideration. Should it become established as curative, many annoying conditions will have been met.

The operative treatment of exophthalmic goitre has recently been receiving much favorable attention. For a long time it has been an open question whether this class of cases was in any wise benefited

by the partial extirpation of the thyroid gland. Indeed, it seemed to have been fairly well established that, except in those cases where the gland became so large as to seriously embarrass the respiratory act, any effort at its removal was to be discouraged. It is true that partial or total thyroidectomy has been performed many times, but the dangers associated with the operation—hemorrhage and absorption of the thyroid secretion—were such as appeared to counter-balance the benefits obtained from the operation.

In Oppenheimer's collected cases, numbering 68, there was a mortality of 9, or nearly 14%; cure was claimed for 18, a little over 26%; benefit claimed for 26 others; leaving 15 unaffected by the treatment. The results, however, secured by Weatherspoon and others, as recently reported, would seem to argue that our former conclusions were faulty, and that removal of the gland, even in the absence of respiratory obstruction, is not infrequently indicated, and is followed by marked improvement of all the distressing symptoms associated with this disease. One lobe is all that may be removed, and sometimes division of the isthmus will relieve the pressure upon the respiratory tract.

With our present uncertainty as to the cause and pathology of exophthalmic goitre, it is not especially clear just how removal of the thyroid can affect the other conditions, but clinical results are always stubborn and convincing facts, regardless of the theories by which they may be surrounded. The belief is rapidly gaining ground that exophthalmic goitre is a glandular disease and has its origin primarily in the thyroid gland. Should this fact become established, the results claimed for the removal of the gland in this condition will be readily comprehended.

The kidney has also been receiving some special attention. It has been decapsulated for the relief of suppression of urine, and suspended for the cure of nephritis. In this connection it may not be presumptuous to say that as yet nothing sufficiently definite has been established to entitle either method to unquestioned confidence. It is admitted that the methods referred to have apparently some claim to recognition, but they are still lacking in that clinical record so necessary to entitle them to be recognized as established methods.

The surgery of gastric ulcer is at present engrossing the best thought of the profession. This troublesome and dangerous condition in the past has been a source of annoyance and disappointment to the doctor as well as of great danger to the patient. Its surgical treatment has been somewhat limited, indeed, quite limited to the most severe cases. Recently, however, the practice of surgical interference

in stubborn cases, has been received with encouragement. The papers of Dr. Cordier, of Kansas City, and of Dr. Mayo—which you heard yesterday—are well calculated to stimulate effort in this direction.

The study of all clinical reports at hand, would seem to indicate that a large number of gastric ulcers are amenable to surgical treatment, from which we may expect reasonably good results. In the absence of any other satisfactory line of treatment, no reasonable objection can be offered to surgical interference. This proposition is of special importance because of the present belief in the causative relation that probably exists between gastric ulcer and carcinoma. Surgeons are almost uniformly agreed that when cancer of the stomach has sufficiently developed as to be palpable, operative interference is not warranted, and, as few cases are fully diagnosed before this stage, the advisability of operating on all gastric ulcers which do not yield to medical treatment, becomes patent.

On the treatment of the diseased appendix, little has been recently written—for all of which we are truly thankful. There seems to be a settled conviction that if the case is seen early, that is, within the first twenty-four or thirty-six hours—the wise thing to do is to remove the offending organ. If not seen until the inflamed process is well under way, the wise thing to do is to wait. Of course, the usual exceptions to this rule hold good, and each surgeon's judgment must be brought into play in determining these exceptions.

Kehr, in his recent work on surgery of the bile tracts, advances many new ideas. His deductions, drawn from the study of 720 cases, while not all sound, are extremely valuable on account of the variety and extent of his resources. He has given up suture of the common duct in all cases, depending upon what he calls "Hepaticus Drainage," combined with "Ectomy." This practice is not entirely new, at least in so far as its occasional application is concerned, for in a certain number of cases it is the only practice that can be resorted to by any one, whether the surgeon wills it or not. But Kehr, we believe, is the first surgeon to abandon the suture in all cases, even in those where suture is easily possible. His statement that he has never seen true recurrence in a gall bladder which has been carefully emptied, rather detracts from the confidence with which the reports on his other observations have been received.

A further study of the clinical reports from various sources on gall-stones, would seem to fully confirm the observations of Dr. Mayo, that they are far more frequent than is generally supposed, and that many cases of alleged gastralgia, indigestion, etc., are

in reality cases of gall-stones. It is, we believe, fully established that many cases of gall-bladder affections, formerly treated by drainage, had better be subjected to excision of the gall-bladder, and if not excision, the most thorough removal of its lining membrane.

The prostate gland of the old man still continues to be a source of much annoyance to both patient and doctor. The old dangers associated with prostatectomy are still with us, and the infirmity of the patient will always confront us. The merits of the Bottini operation are still somewhat open to question. The limited number of cases in which it may be practiced with any rational hope of benefit, somewhat circumscribes its field of usefulness at best. When the lateral lobes are much enlarged, it is very doubtful whether this practice results in any benefit to the patient, and in addition to this the operation must be made with a very limited knowledge of the parts operated upon, and consequently anything like uniform success, even in selected cases, is out of the question. In its favor may be mentioned the small mortality rate following the operation, the avoidance of an anesthetic, and the advantage of the patient not being confined to bed during the convalescent period. It should never be attempted by anyone but the experienced.

The operation for complete removal of the prostate from its capsule has not been attended with the most gratifying results, but its death rate is steadily being reduced, and it is reasonable to hope that when we learn to operate earlier in each case, this operation will be the one to become classical whether made through the suprapubic or perineal route. In many cases it looks as though the old suprapubic cystotomy with its accompanying tube, however troublesome, most safely and surely meets the indications.

In the treatment of malignant neoplasms, little advance, if any, has been made. We are quite as ignorant to-day of their causes, as we were years ago, and until such time as we learn their origin, we must be satisfied with our indifferent and unfortunate results. The records show that carcinoma, both in this country and in England, is increasing with alarming rapidity. This is not alone true of the whites, but also of the blacks, who up to about fifty years ago were almost entirely free from it.

The statistics of Warren and Gould are very interesting in this connection. In every 100,000 living inhabitants, malignant disease occurs in the white 53.93, negroes 36.65, North American Indians 5.31, Chinese a little less liable than the Indians. Carcinoma and tumor are held responsible in the United States for every 1,000 deaths in persons

over 45 years of age, according to the following table: Whites 62.86, Negroes 29.81, North American Indians 14.49, Chinese 12.99; all of which shows the general prevalence and destruction of these growths.

The hopes engendered by reports on the X-ray treatment of carcinoma, are being dispelled as clinical statistics resulting from this treatment come to us. In the superficial epitheliomata it seemed for a time that the use of the X-ray was beneficial, but more mature observations, coming from sources not to be questioned, convince us that permanent results are not to be hoped for.

In the treatment of injured intestines nothing especially new has been offered, except Beverly Campbell's Circular Enterorrhaphy Cuff. While this method has, we believe, an element of safety to recommend it, we fear it is an operation slow, if not difficult of execution, except perhaps in the hands of the most expert. It consists in the main of dissecting back a cuff of serosa and muscularis to the extent of about five centimeters on the distal end from the point of contemplated operation on the bowel. The shortening of the bowel by the removal of about five centimeters of its length, the union of the bowel ends, and the covering of the field of operation by the prepared cuff. It is very evident from the description of the operation given us, that the execution of the different steps is anything but simple, and it is a question whether the added safety of the cuff is sufficient to overcome the evil effects of the necessary manipulation and the long exposure of the parts during the operation.

The special orthopedic work of Dr. Lorenz may or may not be classed as new, according to the various interpretations placed upon it by the different critics. However we classify it, this fact we think is very clear, that so far as its general use is concerned it is new to us. The surgical literature of this country has very little in a clinical way on this particular field. It is, we believe, too early for us to either criticize or endorse from clinical knowledge, the methods employed by Dr. Lorenz and his disciples. It is far more becoming in us to wait until time puts forever at rest any doubts which we may possess as to the merits or demerits of his claim. This is especially true in the light of the facts that a large percentage of the cases operated upon during the last seven months seem to warrant the belief that marked improvement may be confidently looked for. By this I do not mean that the hoped for anatomical result will be generally obtained, but that functional improvement will follow, admits of no doubt. In that class of cases supposed to be amenable to this treatment and to no other, it seems to me that our duty is plain. The little patient should

be given the benefit of the doubt and the operation made. The manipulations, when carefully made under pronounced anesthesia, are comparatively free from danger and the subsequent pain trifling, and should either anatomical or functional success attend the effort, much good will have been accomplished. The different steps of Dr. Lorenz's operation in congenital dislocation of the hip joint, are so well known that we do not here describe them.

In the treatment of head and spinal injuries much valuable work has been done; especially is this true of the head. In both these fields the progressive and informed surgeon no longer waits for Time to make his diagnosis for him, but, availing himself of the experience and clinical results of the past, takes the necessary means of completing his diagnosis, treats his cases along rational lines, and permits time to effect a cure.

Among the more recent contributions on this subject I wish especially to refer to the classical papers of Dr. Dunn, of Minnesota, and Dr. Lemon, of this city, both of which make clear the progress achieved along these lines.

In conclusion permit me to say that surgical work generally is characterized by a spirit of progress and judicial conservatism, and the effort of those working in this department is well worthy of commendation, as being especially directed to fulfill the high mission of our calling—the good of mankind.

Discussion.

DR. C. O. THIENHAUS, Milwaukee—I think we ought not let this excellent paper go by without any discussion whatsoever. Very many things which the doctor has said I endorse fully.

Ultra-conservatism and rashness have been for a long time and will for a long time yet to come be two contending camps in surgery, and the middle course, the golden middle line, is often the best to follow. In regard to hypertrophy of the prostate gland, and methods of vertical operation for this disease, a prominent surgeon once remarked, "I see many cases coming to my hospital for radical operative procedures, but when I have given them a preparatory treatment of from 8 days to 3 weeks, to do away with the accompanying catarrh of the bladder and the residual urine, they feel so well that they do not want to consent to radical operative procedures, and go home."

A case of this class came to me from Michigan: A man, 73 years old, who had had an apoplectic stroke two years before, was suffering severely from the consequences of an enlarged prostate. His urine was mixed with pus and he complained of frequent sudden obstruction to the flow of urine, which could be relieved only by the catheter. After relieving the catarrh of the bladder and finding that the residual urine was not large in amount, I desisted from the major operation of prostatectomy, which would have endangered the life of the man to an extreme degree, and resorted to resection of the

spermatic cords, taking into consideration that this operative procedure is useful in cases of hypertrophy of the prostate gland in which frequent obstruction of the urine is a prevalent symptom. Although I advised him after leaving the hospital to avoid cold, walking in the snow, fishing, etc., his doctor informs me that he is fishing every day and takes no care of himself whatsoever, but feels perfectly well since the operation. You must select your cases and not say that perineal prostatectomy, or suprapubic prostatectomy, or the Bottini operation, or the one done in the case above cited is the only method. There are many methods and you must select that one which is suitable for the individual case. The same is true with Lorenz's method for congenital dislocation of the hip joint. Everyone who has a little knowledge of this field knows that the cases in which we can achieve perfect anatomical results by this method, are but very few, and it has been pointed out time and again that one cannot claim more than from 5 to 15 per cent. of anatomical results by this method; but the functional results are oftentimes very good. It happens very often that the head wanders a little out of the joint, not to the posterior region, but to the anterior region, and finds a firm hold under the anterior inferior spine. Furthermore, there are many cases cited in literature, and you will find them yourself, where the Lorenz method cannot be successful because the acetabulum is so small and so flattened that reluxation to the posterior region must take place, and cases are cited where the Lorenz method was used 3 or 4 times, but each time, when the child walked for some time, reluxation took place.

In other cases the ligamentum teres is so long and enlarged to such a degree that in each case of bloodless reduction it interposes itself between the femur and the acetabulum and makes a perfect result by the Lorenz method impossible. In such cases one has to rely on the bloody method of Hoffa: you must deepen the flattened acetabulum by scoops and remodel the head so that it fits snugly into the joint, and after you have done this and put the remodeled head back so that it does not slip out when the leg is put in more extreme adduction, then you fix the joint with the leg in abduction by a plaster cast. Very good results have been obtained by this bloody method, but it cannot be used when the children are over 9 years of age.

There is, furthermore, another question which has not been settled definitely. Lorenz advised that the reduction of congenital dislocation of the hip be delayed until the third year, but others—among them Häusner and Mickulicz—are of the opinion that these cases be treated as early as possible, and for these cases Mickulicz has advised a special apparatus to be used 2 or 3 hours every day. If no cure has been effected after two years—which, however is very rare—then the Lorenz operation may be performed. After such a preliminary treatment with the Mickulicz apparatus it is not necessary to leave the plaster cast on for 3 to 6 months, but only for 3 to 6 weeks.

DR. LEMON, Milwaukee—As I listened to the very excellent paper of Dr. Earles, in which he has summed up in a very brief and concise manner the surgical work of the year, and in which he has not only summed up the work we have been listening to here the last few days, but has given us a summary of what was done in the surgical section of the American Medical Association, the thought occurred to me, with reference to the program for another year, would it not be a good plan to have some gentleman from

among the number of the older surgeons selected to present just such a paper every year, and have that paper come, as this one does, at the close of the session, so that we may have a brief summary both in the surgical and in the medical section, of the best work that has been done during the year? Thus, as we go away from the meeting, we may carry with us a synopsis or resumé of the best work that has been done.

MYOMECTOMY OF UTERINE FIBROIDS.*

BY A. J. PULS, M. D.,
MILWAUKEE.

It should be our aim when operating on the uterus or the appendages to preserve the healthy tissues and resect only the degenerated or disintegrated parts of the diseased organs. Myomectomy may, therefore, be substituted for the extirpation of the uterus whenever sufficient healthy uterine tissue can be safely left. The procedure of enucleation should be especially practiced on patients remote from the change of life. To prevent the premature menopause with all its nervous symptoms subsequent to hysterectomy, it is considered by many of our best authorities wise to leave one or both ovaries unmolested; besides, these organs delay an untimely atrophy of the vagina and vulva. The tendency to extend the indications for myomectomy is mainly for two purposes, namely, first—to prevent the menopause, and, second—to re-establish the functions of the uterus during the child-bearing period.

The recurrence of fibroids is not such a serious matter but that a subsequent surgical interference cannot correct the primary operation, and then again, recidivation of these benign tumors is not so frequent as has been the generally accepted view. August Martin reports seven cases of recurrence of the fibroids out of 260 cases operated on by the enucleation method. The latter author favors the vaginal route, as do also a number of French and German surgeons who carefully select those cases in which the uterus is not too large and the tumors can be readily brought through the vaginal incision. The suprapubic operation for myomectomy or hysteromyomectomy is known to the German authors as the American method. With few exceptions the American surgeons have adopted the abdominal route, inasmuch as it is a safer measure to ensure control of the bleeding wound surfaces. When a fibroid necessitates the removal of the adjacent uterine mucous mem-

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 5, 1903.

brane, the wound is sutured similarly to the wound made in Cesarean section: first, a separate suture is applied to the uterine membrane, buried mattress sutures secure the muscular structure, and then the serosa is brought together with interrupted sutures.

For submucous tumors situated at or near the fundus of the uterine cavity, bisection of the uterus through the vagina gives access to the tumors, and enucleation is a comparatively easy procedure.

In the following case I changed my method of operating while inspecting the pelvic organs, and instead of doing hysterectomy I performed myomectomy.

Mrs. H., aged 33, married eight years, is the mother of two girls, the oldest seven and the youngest five years old. At the time of her first pregnancy she suffered from gonorrhoic infection, which caused a severe form of ophthalmic blennorrhea in the new-born; both eyes were saved by immediate treatment. The second child, however, was not so fortunate and remains blind to the present day in spite of similar treatment and surgical procedures. During the second lying-in period the patient was ill for many weeks with pelvic inflammation and her recovery has never been complete; besides this, she passed through an attack of typhoid a few years later and since then complains of severe pelvic pains, especially over the hypogastric region.

I was first called to see the patient several months after she had recovered from the typhoid, and found, as the cause of her troubles, an exudate in the right parametrium. Six months later a swelling appeared in the left ligament and a bimanual examination in September, 1902, revealed a tumor closely connected with the left cornu uteri, which gave an impression similar to that of a pyosalpinx. Although there was no fever at this time the patient suffered severe pelvic pain, mostly before and after the menses. The monthly periods were regular, but were scanty and not painful. Leucorrhea was absent.

Abdominal celiotomy was performed Oct. 14, 1902. On opening the peritoneal cavity there was found an extensive adhesion of the omentum to the fundus uteri, also loops of the smaller intestines adherent on both sides to the uterine appendages.

After removal of the intestinal adhesions and dissection of a part of the omentum, the enlarged uterus and the adnexa could be brought into the abdominal wound. A careful inspection of the pathologic changes of the pelvic organs disclosed a uterine tumor consisting of an egg-shaped myoma embodying the entire tissue of the fundus at the left cornu uteri and inclosing in its walls the insertion of the left tube. Both the left and the right tube and ovary were in a state of chronic salpingitis, and only the left ovary appeared healthy and was found in its normal position and not adherent to the neighboring organs. The right tube and ovary were fixed to the pelvic floor and when freed were found to have undergone chronic inflammatory changes. In the anterior wall of the body of the uterus near the insertion of the bladder there was a myoma of the size of a pigeon's

egg, which was easily enucleated and the wound sutured with catgut.

With the exception of these two myomas the uterus proved perfectly normal, it was neither displaced nor enlarged, and I therefore favored an enucleation of the uterine tumors and removal of the entire left tube and also ablation of the right tube and the right cystic ovary, so that the left ovary and the uterus, freed from its tumors, were left in the pelvic cavity.

The patient made an uninterrupted recovery and since then has been free from pain; she menstruates regularly and more freely, and claims that she now enjoys perfect health.

The above-cited case, although unique in its history, is one of the kinds of subserous fibroids which every abdominal surgeon cannot fail to meet. The complications of the uterine tumors together with the presence of a gonorrhoic pyosalpinx is merely a coincidence, since purulent forms of salpingitis and ovaritis are not uncommon in connection with uterine fibroids.

Discussion.

DR. EVANS, La Crosse—I think Dr. Puls is to be congratulated on calling attention to myomectomy in preference to or contrasted with hysterectomy, inasmuch as any movement among surgeons, looking to the preservation of organs rather than to their ablation, is a direction in which we should work.

The position of the uterus, its anatomical location, and its free mobility, make it an organ of very easy attack through the vaginal route, especially if a woman has borne children. It is easily drawn down and inspected throughout the whole extent; also through the abdominal incision it is very easy to deliver the non-adherent uterus through the abdominal wound, and then proceed to do any surgical work on it that may be necessary.

I would just like to follow a line of thought that Dr. Puls has merely touched upon, but along the same line as myomectomy, and that is the doing of hysterotomy in some cases, either vaginal or abdominal; and I refer to those cases that you will curette and curette again, and still the patient will return with hemorrhage. In these cases you should never hesitate to do hysterotomy; that is, freely open the uterus and find out why it is bleeding. My attention was first called to this operation (I had never seen it done although I know it had been done several times previous to my operation) about three years ago in a virgin who had been bleeding and whom I curetted three times, and she returned again with hemorrhage. I did a vaginal hysterotomy, and removed just inside the internal os under the mucosa, a little fibroid not much larger than a marrowfat pea, and sewed up the uterus. I split it up to the fundus, having shoved up the bladder and peritoneum, and could thus inspect the whole interior of the uterus. I sewed it up again and the patient has been perfectly well since.

Just about two weeks ago I had my attention again drawn to it by seeing Dr. Russell in Kelly's clinic in Baltimore do an abdominal hysterotomy. The patient had been curetted three times. The uterus was apparently normal with the exception of a little fibroid that could be felt on the posterior wall; but the patient had returned again and again with this hemorrhage, and so

Dr. Russell opened the abdomen, split the uterus freely, and found the cause of hemorrhage not to be the subperitoneal fibroid on the posterior wall, but a very small fibroid which it had been absolutely impossible to diagnose by bimanual palpation—under the mucosa and about half way up to the fundus. He removed this and then through a little incision over the fibroid in the cul de sac, he removed it with Kelly's fork, sewed up the wound and sewed up the uterus, and said he expected no bad results. He said he had done this operation several times during the past five years. It is an operation I should like to bring to your attention, as it is very feasible and safe, because —except after a miscarriage or something of that kind where there has been an infection—we know the uterus to be practically sterile and safe from pathogenic microbes, and we can with impunity open the uterus, inspect its mucosa, and then close it again.

DR. CUTLER, Verona—I recently confined a woman 44 years of age and made a diagnosis of either twins or a child and a large fibroid tumor. The latter proved to be the case. What shall I do with that? Shall I leave it there or remove it? It is as large as a large fetal head. She is 44 years old, has had several children, but usually about 8 years apart. Her mother died of cancer of the uterus, and she is worried lest this tumor become serious.

DR. C. O. THIENHAUS, Milwaukee—I have hardly anything to add to the paper of Dr. Puls, as hardly any objections can be made to that which he said. In regard to the question, when to perform myomectomy, and when to perform hysteromyomectomy for such cases as cited by the author, the indications must be made according to the findings, general condition, and age of the patient in the individual case. When we have a young woman with 4 or 5 fibroids in the uterus we should naturally do everything in our power to preserve the uterus and only take out the fibroids. When we find the same condition in a woman over 40 we would be easily inclined to remove the uterus with the fibroids. Another question is that of malignancy within fibroid tumors. Cullen recently pointed out before the American Medical Association, that not so seldom fibroid tumors show a tendency to a sarcomatous degeneration, and in response to my question at that meeting, whether or not he regarded a fibroid tumor in which giant cells and myoclasts were found, as malignant—according to the statements of Saenger, he was of the opinion that this was a sign of beginning malignancy.

In all such cases in which clinical symptoms, such as sudden rapid growth or softening of parts of the fibroid would point to a possibility of malignancy, one would naturally prefer hysteromyomectomy, or, if a myomectomy is performed, the pathologic anatomist must make a section of a frozen specimen during the operation, to be sure to exclude malignant degeneration.

In regard to the abdominal and vaginal routes for myomectomy and hysteromyomectomy, so much has been written recently that it is unnecessary to go into details. I think, whenever it is possible, one will prefer the vaginal route. Vaginal myomectomy one would chiefly choose for cases lying in the cervical part of the uterus, when they are small. I have such cases in mind where small fibroids are situated behind the uterus originating from the cervical portion and pressing the peritoneum before them.

DR. H. B. SEARS, Beaver Dam—I would like to inquire as to the probable influence of future pregnancies upon such incisions of the uterus.

DR. PULS (closing)—I will answer the last question by stating that there have been several cases of confinements reported following enucleation for fibroids. Martin reports 5 cases out of 260 cases where pregnancy remained undisturbed and labor was natural. Of course, the cases are very rare, but the operation is done for the purpose of leaving a healthy uterus admitting of gestation. The other point brought forth of removing the uterus, I also would advocate in women far advanced in life. When a woman is remote from the menopause we should try to leave all the tissue we can, but if a woman is nearing the menopause it is not advisable to leave anything else than a healthy ovary.

As to the other question asked by the doctor who has a case of fibroid complicated with pregnancy (referring to Dr. Cutler's case) I would advise removal of the fibroid as soon as possible. I have seen several cases of difficult labor where a fibroid was present; in the first one I remember we found it necessary to perform craniotomy before we could extract the child. The child had been dead several weeks as was noticed at the delivery, and we were obliged to take it piecemeal. The fibroid was very high up in the fundus and could not be extracted, so it was allowed to remain, causing no secondary hemorrhage.

In another case seen a few years ago the fetus also died during the sixth month of pregnancy. There the fibroid was in the anterior wall and is apparently unchanged at the present time. The woman was ignorant of her condition until labor pains began. The child was taken away after the second week, pains were constant but not sufficient to dilate the cervix, the delivery was very slow and the fibroid was not diagnosed until after the removal of the fetus, and then we found the cause of the trouble to be a tumor situated in the anterior uterine wall just at the internal os.

The point that Dr. Evans made of performing hysterotomy is a very good one. I mentioned in my paper what I called bisection of the uterus by the vaginal route for the purpose of removing submucous fibroids. This is a very simple operation and gives excellent results. At first I separate the bladder from the uterus and then bisect the anterior uterine wall and lay its inner surface wide open. Of course it is different from opening the abdomen and then splitting the uterus in the middle line and curetting the mucosa, the operation which Kelly terms hysterotomy.

INFANT FEEDING.*

BY BERTHA E. THOMSON, M. D.,
OSHKOSH, WIS.

Finding the early care of the infant too great a subject for a woman to exhaust in twenty minutes, I have decided to devote my time to that most difficult of all problems in the care of the infant, feeding.

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 4, 1903.

Nature has provided the ideal food for the average child and fortunate, indeed, is the infant that can be reared on this food. We have no patience with those mothers who, for social reasons, and because it is convenient, or because it is the fad, refuse to nurse their young; still, as despicable as these women are, how much more so is the physician who, for popularity or money, encourages them in this senseless folly. If the mother is so soulless, so devoid of all maternal instinct that she does not appreciate this as the most sacred obligation her Creator has intrusted to her care, then the doctor, the educated humanitarian, for his profession's sake, if he has no higher aim, should help her realize this duty.

Most mothers can nurse their children if properly encouraged and directed. It is said one-third of all infants born die under three months. It has also been shown that very few breast-fed children born healthy die under the first year.

In Germany, where the method of feeding is recorded on the death certificate of infants under one year, records show 8 per cent. deaths among the breast-fed children against 51 per cent. artificially fed. In Berlin's Foundling Hospital, where artificial feeding is followed, the mortality is 59 to 93 per cent, while at the Buda Pesth Foundling Hospital, where breast-feeding predominates, the mortality is 15 per cent. Ideal as a mother's milk is, it is subject to variations. Some women are not affected by external conditions, most of them are not so constituted. Food, habits, excitement and illness usually leave their effect on this delicately organized being. The nursing mother should so regulate her life as to produce the best lactation. She should be as free from care, worry and trouble as is possible; should take a certain amount of exercise in the fresh air daily, stopping just short of fatigue. The bowels should be free from constipation, the food should be such as is easily digested by the individual; no hard and fast rule can be given, some women can eat everything without disturbance to themselves or child, others seem to have an idiosyncrasy against certain articles of diet. The individual should refrain from anything that causes disturbance of digestion; the nipple should be made aseptic and kept aseptic. The child's mouth should be washed in a saturated solution of boracic acid before each application. If there is any abrasion of the nipple a shield should be used to protect it while nursing.

The child should be fed at regular intervals, every two hours during the day and one or two feedings at night for the first six weeks; from seven to nine weeks, every two and a half hours; from three to four months, every three hours; from five to nine months, every three

and a half hours, and once, or not at all, at night. The quantity is increased as the interval decreases. With a little patience and perseverence for the first three days or week a child can be taught to awake at regular intervals. I wish to emphasize this fact. It is a common occurrence for the young or ignorant mother to over-feed; the restless, wakeful state, caused by over-feeding, is taken for an indication that the child is hungry and it is fed whenever it cries. Children are creatures of habit. Right here may be laid the foundation of a healthy, stable condition for future life, or the foundation of a dyspeptic and neurotic. If these facts are explained to the mother, you can usually get her co-operation in the work. God help you if there is a grandmother in the house.

Perhaps no ingredient in the milk gives more trouble to the infant than an excess of proteids, for many cannot digest more than a fraction of 1 per cent. Putting the child to the breast too often stimulates the secretion of the gland, greatly increasing proteids; an excess of proteids causes habitual constipation, indigestion, colic, curds and mucous in the stool, finally a soft, thin mucous stool, and thus by applying the child too often we aggravate an already deplorable condition. There is a definite relation between the percentage of proteids and growth. Too little will produce a soft, flabby, pale child, with little resistance. Proteids may be decreased by exercise, giving more liquids or by prolonging nursing intervals.

Too much fat produces diarrhea and vomiting, one or two hours after eating. Six and one-half to seven and one-half per cent. is as much as the average child can consume. Too little fat causes the child to lose flesh and have obstinate constipation. Fat enters into the composition of nerve, brain and marrow. It also supplies the needed heat and force. Fat may be increased by increasing the proteid food of the mother and decreased by decreasing the meats. Too much sugar causes erucations of gas, thin green acid stool; too little sugar causes slow growth in weight. The whole quantity of milk may be increased by liquids, though tea, coffee, beer, wine, etc., have no influence on the secretion except as the water in them increases the quantity. Withholding liquids, purgatives, especially salts, belladonna and camphor and enteritis lessen the activity of the gland.

A healthy child will not heed a slight variation from the normal, but milk that varies from the normal standard will often make a weak child ill. Much as we may deplore the facts, there are times when nursing by the mother is strongly contra-indicated. The wet nurse is either too difficult to procure, or too expensive to keep to make her of general utility, and we are compelled to use some artificial food.

For this we want one as near like the human as is possible. Modified cow's milk, because of its ready access, cheapness and comparatively easy modification, is the most useful.

Dr. Joseph Winters, of New York, who has had a large experience in laboratory feeding, says: With accurate, low percentage in the beginning an infant can be fed on modified cow's milk the first days of life without any disturbance of digestion; he also says that much of the trouble in home modified milk is due to a lack of explicit directions as to how long the milk should stand before removing the cream, and to the layers used. He tells us the milk should stand sixteen hours after milking and only the top milk should be used. In trying to feed by artificial food, we must remember that nature's food is of animal origin, is living, that it is alkaline, while cow's milk is neutral or acid; that human milk contains a small per cent. of proteids and this composed mostly of an easily absorbable albumen, while cow's milk contains a relatively large amount of proteids, and this composed largely of casein not easily digested. In human milk sugar and fat are in excess of proteids, in cow's milk nearly equal. Perhaps no one has given us a more valuable discovery in the past century than Dr. Arthur Meigs, when he made known to the world the composition of human milk. This discovery enables us to so modify cow's milk as to make it a very near substitute for human milk.

When we use cow's milk, it should be from the herd. This is more uniform and less likely to contain bacteria. If we can get clean milk the raw milk is better than either sterilized or pasteurized. Many others claim these processes cause a chemical change, though this is disputed by others. It is claimed that scurvy has followed their use, which has rapidly cleared up with the use of raw milk with no other treatment. Sterilization or pasteurization destroys typhoid, tubercle, diphtheria, cholera and some other bacteria, but it does not destroy the hay bacteria, which are very poisonous, cultures having caused fatal diarrhea in dogs. These bacteria are found in bedding and dust around the barns, and their spores are very tenacious of life. It requires hours of boiling or weeks of sunshine to kill them. Much depends on the cleanliness of bottle and nipple. There should be enough bottles for all feedings during the twenty-four hours. These should be cleaned and boiled after each feeding. The black rubber nipple is best, it being soft, with least odor and taste. It should have an opening large enough to allow, when inverted, a drop to escape. There should be two of these, which should be cleansed and allowed to stand in sterilized water.

"The agricultural experimental station has proven that, when

milk is cooled immediately after milking to 40° F. all bacterial growth is arrested and continues so, if the milk is kept at a low temperature; under such conditions milk will keep sweet three weeks. It has been done in this country and in England."

Then, if the clean milk can be milked into clean quart jars, well covered, cooled and kept cool, this is sufficient until modified for feeding. The modified milk can be put into as many aseptic bottles as are required for the twenty-four hours' feeding, each containing enough for one feeding, closed with sterilized cotton and placed in a refrigerator until needed; as each bottle is required it can be heated to 90° or 100°, the cotton removed and the nipple slipped over the bottle. I have always preferred the use of milk sugar for sweetening. It seems to me more easily digested and assimilated than cane sugar, less likely to cause gastro-intestinal troubles; however, as great an authority as Dr. A. Jacobi, of New York, insists on the use of cane sugar, giving as his reason that milk sugar is rapidly converted into lactic acid, and under its influence cow's milk curds at once, while cane sugar is not thus easily transformed and is often used to counteract the rapid conversion of milk, and as a preservative of articles of food.

The child should be in a semi-recumbent position while feeding, should be fed slowly from twenty to thirty minutes, and should not be fed when very cold, warm or extremely excited. Overfeeding is a common failing, especially with a bottle-fed baby. The capacity of the average child is, first half week, ½ oz.; last half, 1 oz.; two weeks, 1½ oz.; three weeks, 2 oz.; five, six and seven weeks, 2½ oz.; seven, eight and nine, 3 oz.; three to four months, 3 to 4 oz.; five to six months, 5 to 6 oz. The premature infant's power to digest is much weaker than the full term child; hence all the ingredients should be lessened. Begin with one dram and gradually increase. When the mother has not enough milk for the child, part of the feedings may be artificial. Starches are not much needed by the average infant, and many times cause fermentation, acidity, colic and diarrhea, yet occasionally an infant seems to thrive on them. Dr. Jacobi claims that the infant at birth is able to digest a small per cent. of starch and that its power increases with each succeeding month. He recommends barley and oatmeal water in place of plain water to dilute the milk. If there is solid curding, or a disease in which the gastric juice is interfered with, give a little sodium chloride with the food. Table salt accelerates tissue change by eliminating urea and carbonic acids. Little sugar should be given during sickness, as it is absorbed slowly, there is then more ferment in both mouth and stomach.

Chemistry and theory often seem at variance with practice, and we sometimes get surprising results. In Wisconsin, where we have no milk laboratories under the supervision of medical men, it is often impossible to get uncontaminated milk. If it were always possible we would have little need for prepared foods, as it is we occasionally find babies who do well on some of these foods, where we have had failure on the milk; then, too, there are times—as in traveling—when it is impossible to get the fresh cow's milk. All of these foods lack some of the ingredients of human milk; usually they lack fat and have an excess of proteids.

Of the condensed milks on the market, the unsweetened whole milk is the best. To this water is added in proper proportion which makes it resemble cow's milk, then cream and milk sugar to make it resemble human milk. The condensing seems to cause some change which makes it more digestible than fresh cow's milk, and it sometimes seems to agree better with delicate children. I have seen children do well on it where every other form of feeding had failed. Condensing does not necessarily make the milk sterile. The microorganisms often lie dormant and grow slowly. Babies fed on this food have less resistance to disease. Babies often do better when a decoction of barley or oatmeal water is used to dilute the milk. These contain but little starch, are almost identical in composition, except that oatmeal is laxative and should be used where there is constipation; while the barley should be used in diarrhea. In using the barley the whole barley corn should be used. Peptonized milk is good for weakly or sickly children, but should not be continued for any great length of time, as by non-development it weakens the digestive powers. In weak and debilitating diseases where no hydrochloric acid is formed in the secretions, small quantities well diluted may be given.

Infants should be given pure water to drink several times daily; this is often neglected. Farinaceous food should not be given until the child has teeth. "Many times it becomes necessary to know the composition of the mother's milk in order to know the cause of the infant's illness. An elaborate chemical analysis is not always feasible. There is a simple clinical method which is fairly accurate: take from the middle of the nursing 15 to 20 c.c. of milk and determine the sp. gr. by a small hydrometer. Place 10 c.c. in a graduated cylinder test-tube, stop and keep it at 70° F. for twenty-four hours. The cream will form a ring at the top and can be easily read off. Cream bears to the total fat in milk a ratio of 3 to 5. It is easy then to determine the amount of fat in the milk. Now the relative amount of proteids may be determined when the fat and specific gravity are known. If

both fat (8 to 10%) and specific gravity (1033 to 1034) are high, the proteids are high. If fat is low (2 to 4) and specific gravity high, the proteids are normal. If the fat is high and specific gravity low, the proteids are low. If both are low, the proteids are low.

The Babcock's Milk Test is a cheap centrifuge, by which the per cent. of fat may be accurately and quickly found. The milk is placed in the graduate flask, equal parts of milk and commercial sulphuric acid, then whirled at a velocity of seven to eight hundred revolutions per minute. The acids transform the proteids, caseine, etc., into a soluble acid albumen, which offers no resistance to the fat. The fat rises in the flask and the per cent. can easily be read. Those who have not in their possession Dr. Joseph Winter's invaluable little book called "The Feeding of Infants," or "Home Guide for Modifying Milk," can obtain it from E. P. Dutton & Co., 31 West 23rd St., New York.

Discussion.

DR. J. R. BARNETT, Neenah.—Dr. Thomson has cleared this ground so thoroughly that there does not seem to be any underbrush even for the fire of discussion to spread through. It is pretty hard to find anything to seize upon to discuss. Most of the things she has said are entirely in harmony with the results of my own experience.

Speaking of condensed milk, I have found it a very useful food in the place of the natural food or modified cow's milk fresh, and it has seemed to me, as Dr. Thomson has said, that something occurs in the process of sterilizing and canning that makes it more digestible and less likely to create disturbance of the stomach and bowels than modified milk or other forms of artificial food. But not long ago I was reading a report by Dr. Ager that was copied I think, from the *Brooklyn Medical Journal*, giving some comparisons between New York and Brooklyn in the effects of artificial feeding by condensed milk. From his report it seemed that in Brooklyn they used proportionately about twice as much condensed milk as they did in New York, and very singularly the proportion of deaths in gastro-intestinal diseases in children, corresponded almost exactly. There is a correspondence between the proportionate amount used in infant feeding and the proportionate deaths from all intestinal diseases in children. So it seemed as if there was a positive relation between the two, and when you consider that Brooklyn is a less thickly populated city than New York, and it has been for a good many years a sort of city of homes, the lesson would seem to be all the more emphatic.

The doctor alluded very briefly to the use of artificial digestants in milk. I have found those digestants useful in some cases. I make use of the pancreatic extract with bi-carbonate of sodium, as is very often done. But I do not think that that has any advantage, as a general thing, with the average infant, above the simple modified cow's milk.

DR. LORENZO BOORSE, Milwaukee.—The subject of infant feeding is indeed a very important and a very large one. It is a notable fact that many physicians, according to my own observation, and a great majority of trained nurses, know very little about the care of the new-born. The physician as a

rule seems to think that when he has delivered the afterbirth and perhaps sewed up a lacerated perineum, he has performed his whole duty, and the infant is immediately given to the care of the nurse or some kind-hearted old lady who happens to be acting in that capacity, and no further attention is given to its care. The result is that the infant is not properly nourished, if nursed by the mother, and if not nursed by the mother it is not properly fed by means of a substitute food. It is a fact that many of our trained nurses know very little about the immediate care of the new-born, and the result is that many of these infants get a very bad start. About 1890, McLean, of New York, first called attention to inanition fever. Since then a great many cases have been reported. I have watched cases occurring in my own practice, very carefully, and under the care of some of our best professional nurses, and I have found that inanition fever develops very rapidly, and to an alarming extent in many cases. So that I would emphasize the importance of taking the daily temperature of the infant, and of daily weighing the infant. The careful weighing of the infant is the most reliable index of the condition of its nutrition. It is known that an infant loses about 1-10 of its birth weight during the first four or five days. My observation has been that when this condition of inanition fever develops which is due to a lack of nourishment, the loss of weight is very rapid, and I have recently had under my care a child that lost two pounds in the first ten days, with a temperature of 103.5°. This child was under the care of a professional nurse.

Regular habits of nursing are extremely important. It is well known that the composition of milk is modified by the periods of nursing. Frequent nursing stimulates the metabolism of the gland, the secretory function of the gland increasing the solids of the milk, while nursing at long intervals produces a milk poor in solid constituents.

When it comes to substitute feeding, the regular periods of feeding and the amount of food that should be given at each feeding are of still greater importance. I have at the present time under my care, a child that was put on substitute food during the second week of its life. Instead of giving that child a proper amount of food it was immediately given five ounces of a modified milk preparation. Now, that child had a good digestion and it continued to digest that for perhaps a few weeks, when its stomach rebelled. The result was inevitable; there was dilatation of the stomach, vomiting, malnutrition, extreme emaciation. The child is six months of age at the present time and weighs ten pounds—two pounds more than its birth weight—under careful feeding for the past month.

The clinical history of this case resembles those frequently elicited. The great majority of cases of malnutrition, in whatever form met with, are the result of indigestion, which can be traced to improper food or improper methods of feeding as the chief etiological factor.

DR. BERTHA V. THOMSON (closing).—In regard to patients losing in flesh, as Dr. Boorse has remarked, where the nourishment was not proper, Dr. Winters emphasizes the fact that if the babe is given proper nourishment from the beginning, in amount and constituents, it will not lose flesh.

WISCONSIN MEDICAL JOURNAL.

OFFICIAL ORGAN OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A Monthly Journal, published by the Wisconsin Medical Journal Publishing Co., and owned by and devoted to the interests of the Medical Profession of this State.

Original articles, Clinical notes, Correspondence, and Communications of interest to the Medical Profession are solicited. Reprints of articles contributed to this Journal will be furnished at cost price, but a number of copies of the Journal will be furnished contributors gratis. All manuscripts should be typewritten.

ARTHUR J. PATEK, A. B., M. D., Editor,
121 Wisconsin Street, Milwaukee.

Associate Editors.

CHAS. S. SHELDON, M. D., Madison.
HOYT E. DEARHOLT, M. D., Milwaukee.
OTTO H. FOERSTER, M. D., Milwaukee.
ALBERT W. MYERS, M. D., Milwaukee.

Collaborators:

Horace M. Brown, M. D.,	Milwaukee	U. O. B. Wingate, M. D.,	Milwaukee
Arthur J. Burgess, M. D.,	"	Chas. Zimmerman, M. D.,	"
Richard Dewey, M. D.,	"	Frank H. Edsall, M. D.,	Madison, Wis.
Louis Frank, M. D.,	"	W. E. Fairfield, M. D.,	Green Bay, "
Walter Kempster, M. D.,	"	Wm. E. Ground, M. D.,	W. Superior, "
William Mackie, M. D.,	"	Julius Noer, M. D.,	Stoughton, "
Solon Marks, M. D.,	"	Chas. W. Oviatt, M. D.,	Oshkosh, "
P. H. McGovern, M. D.,	"	L. H. Prince, M. D.,	Palmyra, "
Gilbert E. Seaman, M. D.,	"	H. Reineking, M. D.,	Milwaukee, "
Wm. H. Washburn, M. D.,	"	W. T. Sarles, M. D.,	Sparta, "

Annual Subscription, - - - $2.00. Single Copies, - - - - - $0.20.

Address all business communications to
M. M. TAYLOR, Business Manager,
709 Herman Bldg., Milwaukee, Wis.

Vol. II. MARCH, 1904. No. 10.

EDITORIAL COMMENT.

GRAFT.

At a recent meeting of the Physicians' Club of Chicago the subject of "Graft" was under discussion, and Mr. Clarence Darrow, a well-known lawyer, defined graft as follows: "The effort of any human being to take from society or from another human being or animal more than he really gives to society in return." Graft is a subject which is receiving widespread attention at the present time.

Graft in congress, graft in various departments at Washington, graft in state affairs, graft in municipal affairs, graft in the conduct of the public press, graft in the pulpit, graft everywhere seems to be the order of the day. We have to deal with graft in the medical profession and let us see to it that it is even more energetically dealt with than is being done with graft in public life. The surgeons and specialists in high places who indulge in graft by offering other physicians bribes in the form of commissions for patients sent to them, as well as physicians who accept these bribes, should be exposed and denounced by the honest men of the profession. The grafters who write high sounding but meaningless praise of every secret nostrum, the manufacturer of which promises returns, is also deserving of our serious attention.

The man who advertises his operations and practice by newspaper interviews on the faintest pretext or on no pretext at all, is guilty of graft, and no effort should be spared to show him the evil of his ways, or to expose him.

The medical hypocrite whose religion may be covered by a postage stamp but whose character is still smaller than his religion, exercises graft when he works the church for practice to the disadvantage of his more scrupulous and less grafty brother.

The cheap medical college whose only excuse for existence is the advertisement of its faculty, and which has nothing of value to offer to the student but the promise of an easy and shortened course, and farcical examinations, is one of the most pernicious forms of medical graft and one which the profession should discourage at every opportunity.

The red-light-machine-made specialist who surrounds himself with senseless but gaudy and impressive machinery for the purpose of catching the support of the unwary general practitioner and impressing the public, is indulging in a species of graft which has made many of this class successful business men but poor physicians.

And so we might go on at great length in the discussion of graft, but perhaps to no good purpose. Most of us recognize graft when we see it, particularly medical graft. Let us carefully label it as opportunity arises and assign it to its proper place, *i. e.*, beyond the pale of professional countenance—in the realm of quackery and charlatanism.

A REMEDY FOR AN EVIL.

We have on previous occasions called attention to the quack evil, and the part played by the newspapers in its exploitation. We have urged, too, that this matter be taken under advisement by the various County Societies, so that at the next annual meeting of the State Society a united action could be taken with the prospect that something may be achieved thereby.

We wish now to call attention to another evil that appeals to every honest and decency-loving individual, that is, the filthy "manhood restored" columns of our daily press, illustrated in a manner to bring the blush of shame to every cheek, couched in terms that appeal to the lascivious element of developing youth, and detailing as afflictions certain conditions that are normal—and all this merely to exact tribute from those innocent enough to put credence in these foul and lying statements. This is an evil that is so obtrusive as to force its presence upon every reader of the daily papers, and is roundly condemned by every one—save the publishers.

We read occasionally of punishment meted out to individuals for sending obscene literature in the mails. The government does not approve of besmirching its mail bags with letters whose contents savor of the immoral. Can indecency be more vile than that of the advertisements daily forced upon us? Where then is the justice that makes it a felony to send an obscene document through the mails intended for perusal by one individual, as compared with the enormity of the offence when an equally vile thing is daily flaunted, and openly, to the gaze of millions, and remains uncondemned? To suppress this is not a suppression of the freedom of the press, but not to suppress it is a moral obliquity that is disgusting in the extreme.

What are the possible remedies? To appeal to publishers on behalf of mothers, daughters and sons? This has been tried, but found wanting. The legislatures of two states, Iowa and Michigan, have attacked this problem successfully, and so important a step is this that no apology is needed in our drawing attention to it.

Section 4954 of the Iowa Statutes reads as follows: "Whoever prints or publishes, or causes to be printed or published, in any newspaper published or circulated in this state, any advertisement of medicine, drug, nostrum, or apparatus for the cure of private or venereal disease, or shall circulate or distribute any newspaper containing such an advertisement or notice, shall be guilty of a misdemeanor, and

shall be fined not more than one thousand dollars, nor less than fifty dollars, or be imprisoned in the county jail not more than one year, or both." And section 3, subdivision 6, of the Nottingham Medical Act (Act No. 353, laws of 1903, Michigan), which went into effect Sept. 17, 1903, reads: "The Board of Registration in Medicine shall refuse to issue a certificate of registration provided for in this section to any person guilty of grossly unprofessional and dishonest conduct of a character likely to deceive the public, and said board shall, after due notice and hearing, revoke a certificate issued subsequent to the date of the passage of this act, or subsequent to the date of the passage of act number two hundred thirty-seven of the public acts of eighteen hundred ninety-nine, for like cause or for offenses involving moral turpitude, habitual intemperance, the drug habit, or for fraud or perjury in connection with obtaining of a certificate of registration, or for a certificate obtained or issued through error, when such offenses shall have been legally established in a court of competent jurisdiction. And, provided further, after the passage of this act, the board may at its discretion revoke the certificate of registration, after due notice and hearing, of any registered practitioner who inserts any advertisement in any newspaper, pamphlet, circular, or other written or printed paper, relative to venereal diseases or other matter of any obscene or offensive nature derogatory to good morals."

Thus we see from what opposite standpoints this "nasty ad" evil has been met: in the one case the immoral advertiser, in the other the immoral publisher assumes the guilt. We would not presume to argue the question of preponderance of guilt, but suffice it for our purpose to know that a remedy has been found, and a most excellent precedent established.

If our County Societies would but choose to lend an ear to our plea that they consider these evils that threaten us on all sides, that they discuss these remedies at their gatherings, that they weigh carefully the feasibility of acting upon these established precedents, then may we hope to accomplish something towards the desired end; and if our earnestness and sincerity are persistent and consistent, there must come a time, no matter how many the rebuffs until then, when our state will be purged of this medical villainy, and the newspapers purged of this flagrant prostitution of their reading columns to the greed of soulless publishers.

REGISTRATION FEES.

The physicians of Grant county are somewhat exercised, and rightly so, over the refusal of the County Board to allow them the fees for registration of births and deaths as provided by law. The attorney general has given the official opinion that the compensation for reporting births and deaths to village or town clerks is 75 cents. This is his interpretation of the law passed in 1903, and there seems to be no definite reason why the County Board should have at any time since their attention was called to this fact refused to pay the sum guaranteed by law.

The physicians of Grant county, and those other counties in which a similar injustice is being done, should, by a united stand, compel the payment of the fees due them. It is obviously more time-consuming to fill out these blanks and take them to the proper authorities in small localities than in larger cities, and the busy country practitioner who eats and sleeps in his carriage, is surely entitled to receive that compensation for his services to the county which the law has seen fit to provide for him.

WISCONSIN STATE BOARD OF HEALTH BULLETIN.

We note with pleasure the advent of a new publication, a quarterly bulletin issued by the State Board of Health. In the first number the work of the State Hygienic Laboratory is outlined, and the benefits of such an institution to those cities and towns of the state that are unable to support their own laboratories, will easily be appreciated. It is a pity that the legislature has made so small an appropriation for carrying on this work, but when the need for such an institution will have been fully demonstrated, the legislators will probably come to the rescue with a more generous donation.

In an article on disinfection, the methods for purifying an infected atmosphere of contagion are dwelt upon. The formaldehyde generators are advocated as having given the best results. We have been under the impression that this method had been superseded—by those who have experimented and found it wanting in penetration and reliability—by the wet sheet method of distributing the vapor. The lack of efficient penetrating powers of even this method is well known. Several other editorial announcements and a list of embalmers licensed by the State Board complete this first bulletin.

We trust this bulletin has come to stay, and even though but a quarterly, are sure that it will have much interesting and valuable information to disseminate.

NEWS ITEMS.

"The Daily Medical" published in New York and London, has some features that make it a decided addition to our list of medical periodicals. In addition to one or more original articles and editorials, it brings telegraphic announcements of medical happenings of more or less general interest, and also condensed reports of some of the more important contributions to science. Being published more frequently than other medical periodicals, it serves as a sort of advance agent of news that comes to us in more elaborate form in other weekly or monthly journals.

A private school for defective vision, the purpose of which is the education and care of blind children or those whose vision is so much reduced as to make it impossible for them to take advantage of the courses in the ordinary public or private schools, has been established in Milwaukee, with Alice Burnham Fellows as superintendent. Pupils of all ages are admitted and the course includes everything from the kindergarten to a full high school curriculum.

Dr. U. O. B. Wingate whose term of office as member of the State Board of Health has now expired, will remain in Milwaukee, and confine himself to the practice of nervous and mental diseases, which he has taught for the past ten years at the Wisconsin College of Physicians and Surgeons.

An examination for Assistant Surgeon United States Public Health and Marine Hospital Service, will be held at Washington, D. C., April 4th, 1904. Candidates must be graduates in medicine between 22 and 30 years of age. Assistant Surgeons on entrance receive $1,600 per year and quarters.

Special Cars for Consumptives.— Adopting the recommendation of the United States Public Health and Marine Hospital Service, the Pullman Car Co. has announced that on certain days each week they will run special cars for consumptives from eastern cities to the Pacific Coast.

The Grant County Medical Society has issued in neat form an announcement to its members for the next quarterly meeting to be held at Platteville, Wis., on May 12th. A good feature is the printing of a time card stating arrival and departure of trains.

Typhoid Fever and Diphtheria are epidemic at the Minnesota State University and the closure of the institution is contemplated.

Dr. R. J. Carr, who had practiced in Beloit for the past seven years, died of typhoid fever on Feb. 8th.

The Milwaukee Anti-spitting Ordinance which was passed March 7th, has been vetoed by Mayor Rose.

A State Hospital for Tuberculosis will be established in Iowa.

CORRESPONDENCE.

PRESENT STATUS OF THE LORENZ OPERATIONS IN CHICAGO.

Believing that some misapprehension had been caused by the newspaper accounts of a report made in New York by Dr. Ridlon, of Chicago, on the ultimate results of the operations of Dr. Lorenz done there, I obtained a personal interview with the author for the WISCONSIN MEDICAL JOURNAL.

The paper, which will appear in the Journal of the American Medical Association in the course of a month or so, was in the main laudatory of the Lorenz method for the reduction of congenital dislocations of the hip. The author believes the operation to be the one of choice, but thinks that there has been considerable exaggeration in the large percentage of perfect results reported. He calls attention to the dangers of the operation, which are often ignored. He divides his report of 146 cases into four groups. The first group of 10 cases was seen by him between 1893 and 1897. These cases were not operated upon.

Second group, from his first operation in July, 1897, to the coming of Lorenz in October, 1902, 40 patients with 51 dislocated hips. Twenty-four were operated; 5 were failures; 5 relapsed; 1 supracotyloid; 2 anterior transpositions; 2 perfect replacements, and 9 apparently in place when the plaster was removed, but cannot now be traced.

Third group were the Lorenz cases. Seventeen patients with 27 hips examined and rejected; 3 others that he advised operation and that have not been operated; and 1 additional that Dr. Ridlon has since operated. Lorenz operated 29 hips in 25 patients. The results were 13 anterior transpositions; 6 supracotyloid displacements; 7 failures; 1 apparent replacement, not verified by skiagram, and 2 perfect replacements, verified by skiagram on removal of splint, but not examined since.

Fourth group, Dr. Ridlon's cases, 42 patients with 52 dislocated hips. The results were: 7 anterior transpositions; 4 supracotyloid displacements; 5 failures; 4 apparent replacements, that have not been examined since the removal of the splint; 6 perfect replacements; 2 hips rejected in a patient 21 years old; 4 refused operation; 6 are waiting for a place in the hospital; 14 are still in plaster. Then there was another not mentioned in the paper that is still in plaster.

In conclusion he believes that perfect success in from 10-20 per cent. of selected cases is an excellent result. (H. E. D.)

BALTIMORE LETTER.

Tumor in the Spinal Cord. Perineal Herpes Zoster. Intra-Pelvic Hematoma. Coagulation Time of the Blood. Limitations of Urinary Analysis.

During December two regular meetings of the Johns Hopkins Hospital Medical Society were held, one on December 7th and one on December 21st. Dr. Thomas opened the program on December 7th with the discussion of an interesting case of *Tumor in the Spinal Cord.* The patient, a man of thirty, was admitted in the latter part of October. His family history and past history are unimportant. There is no history of injury. In July, 1901, he began to complain of pain in the left arm. It began in the forearm and gradually extended upward. That fall it became very severe and kept him awake at night. When getting up mornings he had great difficulty on account of severe pain when he moved his head. After he once succeeded in getting up he felt all right except that with the least movement of his head, as sneezing, laughing or coughing, he had a severe pain running down the left arm. This continued without change for about one year. During the last year he has had some trouble lifting the left leg. Since the onset he has noticed that he did not appreciate cold on his right side when he took a bath or stepped upon a cold floor. He has used his left hand very little since 1901. This hand has been getting thin during the last year and losing strength. The examination shows a healthy looking man. The left hand is weak and atrophied. On moving the head backward or forward the patient complains of pain on the inner surface of left arm. There is complete loss of temperature and pain sensation on the right side of the body up to the axillary line and to some extent on the inner surface of the arm. There are no sensory disturbances on the left side. There is no disturbance to touch on either side. The patient walks stiffly on the left leg, it being weak, especially in the flexor muscles. There is exaggeration of the knee and ankle reflex on the left side, and both patellar and ankle clonus are present. Babinsky's sign is present. On the right there is an exaggeration of the deep reflexes but no clonus. There are no bladder or rectal symptoms and no sexual weakness.

The history and examination pointed to a pressure on the right side of the cord. Tuberculin was tried but it gave no reaction. The x-ray was negative. The fact that the pain had preceded the other symptoms suggested that the pressure was extra-dural. The pressure was located clinically in the first thoracic segment. An operation was advised and the patient consented.

Dr. Cushing now took up the discussion and gave the details of the operation. It was decided that the pressure was being exerted on the 6th or 7th cervical segment, so the operation was done to expose the 4th and 5th cervical vertebræ. When this was done the tumor was at once exposed. The tumor was intraspinal and easily removed. Histologically it proved to be a fibrosarcoma. The cord was not injured. The functional result has been perfect. There is still some slight right sided anesthesia. The walking is now normal. There is no longer any dragging of the left foot as before the operation.

Dr. Cushing reported a second case, one of *Perineal Herpes Zoster.* The patient came to the hospital during the past summer with facial neuralgia,

and the Gasserian ganglion was removed for the relief of the pain. Five days after the operation he complained of pain in the back and legs. This was followed by the typical eruption of herpes zoster on the perineum. There was no elevation of temperature. Perineal zoster is a rather rare affection. Out of the 500 cases of herpes zoster reported by Head only seven were perineal. In this case the eruption was confined definitely to the 4th sacral segment—the scrotum and perineum.

Dr. Williams reported a case of *Intra-Pelvic Hematoma* following labor. The patient, a woman of 33, was delivered of her first child on November 2d. The labor lasted 36 hours. The first stage was slow—forceps were applied without anesthesia. The placenta was delivered normally. Shortly after delivery the patient complained of very intense pain about the rectum. Three hours later symptoms of shock began to appear. On examination the whole lower abdomen was filled with a tumor which fluctuated and extended as far as the umbilicus. The fundus of the uterus could be felt above the tumor. On vaginal examination the left and posterior vaginal fornices were depressed. The cervix was pointing backward and at the level of the promontory. There were no cervical tears or external hemorrhage. An operation was thought necessary and the abdomen was opened at 1 A. M. A large blood cavity was opened into. This was cleaned out. There was no sign of uterine rupture or point of large hemorrhage. There was slight oozing at the base of the bladder.

The abdominal cavity was packed with gauze. Recovery was satisfactory. There are not more than 20 cases of Intra-Pelvic Hematoma following labor on record, and this one is the only one in which an operation has been performed. The cause is a laceration with free hemorrhage into the broad ligament, in this case undoubtedly following the application of forceps.

(R. G. W.)

At the meeting of the Johns Hopkins Hospital Medical Society held December 21st, 1903, the first paper on the program was by Dr. Boggs, who reported some recent work on the effects of certain drugs on the *coagulation time of the blood*. He prefaced his remarks by showing a new instrument for the estimation of the time of coagulation. The instrument is so constructed that the drop of blood revolves at a high rate of speed in a moist chamber under a microscope. The formation of the fibrin is directly observed. He claims that this instrument gives more constant results than any other in use at the present time. He made observations on the blood of both man and animal, trying the effect of gelatine, calcium chloride and calcium lactate. With gelatine he obtained no effect whatever, while the calcium salts had a very decided effect in reducing the coagulation time, *i. e.*, causing the blood to coagulate in a shorter time than it did previous to the administration of the drug. He found that the calcium salts acted in cases of gall stone with jaundice, rheumatic purpura, hemophilia and scorbutus, but he obtained no results in the primary anemias.

Dr. Cabot, of Boston, then read a paper on the *Limitations of Urinary Analysis*. In brief his remarks were as follows: The medical student of to-day is prone to misdirected accuracy. Life is short and the art of medi-

cine long and we must realize where to be inaccurate. There is a large amount of misdirected energy in urinary analysis. In cases of renal disease the urine alone will not tell you whether the attack be acute or chronic. To illustrate the inaccuracy of our methods of analysis he cited two cases. The first, an Italian who was admitted to the Massachusetts General Hospital in an unconscious condition. He had a moderate leucocytosis and a temperature of 102.8 degrees. There was slight consolidation at the apex of the left lung. The heart was normal. The catheterized urine was full of casts and contained 0.5 per cent. albumin. Lumbar puncture was negative. Death occurred the next day, and at autopsy a cerebro-spinal meningitis was discovered from which the specific micro-organism was grown. The kidneys were absolutely negative.

In the second case, after an exploratory laparotomy, the patient, whose urine had previously been absolutely negative, developed symptoms of uremia. The urinary excretion *per diem* was reduced to 12 ounces. There was edema of the face, with turbid urine full of casts and albumin and showing a specific gravity of 1014. At autopsy the kidneys showed nothing. These striking cases led to an investigation of the records of the hospital. Of 193 cases in which a diagnosis of acute glomerular nephritis was made at autopsy, only 5 had been recognized ante mortem, and in these five cases there was edema besides the urinary findings. In 17 cases in which a diagnosis of chronic glomerular nephritis was made post mortem, 15 had been recognized before death by a study of the urine. But in all these cases the clinical picture was so characteristic that the diagnosis could have been made without urinary examination.

Of 37 cases of chronic interstitial nephritis, fourteen were recognized as some form of nephritis, but only four were correctly diagnosed. In nineteen of these cases no nephritis was recognized at all until autopsy.

Dr. Cabot went on to say that if plenty of urine were used and the centrifuge employed you could find casts in any normal urine. In concluding he said that we could get just as good an idea of the working of the kidneys by observing the specific gravity, color and amount of the urine—that this method was much less laborious and just as accurate as the methods employed in so many hospitals.

This paper aroused a good deal of discussion, Dr. Welch's remarks being perhaps the most pertinent. He said that the pathologist was as much at fault as the clinician, that we do not know on what particular alterations in the kidney the production of albumin and casts depends, that our real problem was rather, why does not the urine always contain albumin? He stated that we could not assume that the kidneys in the two cases cited by Dr. Cabot were normal because no lesions were found. (R. G. W.)

THE STATE MEDICAL SOCIETY OF WISCONSIN.

ORGANIZED 1841.

Officers for 1903-1904.

F. E. WALBRIDGE, Milwaukee, President.

JAMES MILLS, Janesville, 1st Vice-Pres. C. C. GRATIOT, Shullsburg, 2nd Vice-Pres.

CHAS. S. SHELDON, Madison, Secretary. S. S. HALL, Ripon, Treasurer.

Provisional Councilors.

1st Dist., J. G. Meachem, - - - - Racine	7th Dist., W. T. Sarles, - - - - Sparta
2nd Dist., J. S. Walbridge, - - - - Berlin	8th Dist., J. F. Pritchard. - - Manitowoc
3rd Dist., C. S. Smith, - - - - - Elroy	9th Dist., T. J. Redelings, - - Marinette
4th and 5th Dist., G. A. Kletzsch, - Milwaukee	10th Dist., J. M. Dodd, - - - - Ashland
5th Dist., Geo. V. Mears, - - - Fond du Lac	11th Dist., E. L. Boothby, - - - Hammond

Next Annual Session, Milwaukee, June, 1904.

The Wisconsin Medical Journal, Official Organ.

SOCIETY PROCEEDINGS.

ORGANIZATION NOTES.

The only gain during the past month is Vilas County, which has organized, but has not yet reported. Marquette, Crawford and Vernon Counties have completed their organization and received charters, making 46 regularly chartered county societies to date. Nine other counties are organized but have not yet received charters—making 55 organized societies, comprising 59 out of the 71 counties of the state. This leaves 12 counties unorganized. Councilor Dodd writes that he hopes to organize Forest County soon, while the other counties still outside the fold are not wholly unresponsive.

The following circular has been sent to each county secretary and president, and every effort is being made to have the annual reports in April as full and complete as possible:

MADISON, WIS., March 4, 1904.

DEAR DOCTOR: The Council of the State Medical Society of Wisconsin has thought best, in order to secure uniformity and efficiency of action, to send to each County President and Secretary the following circular of information and suggestion:

1st. *Dues*: *All members* of the State Society, prior to admission of members of County Societies under the re-organization, are expected to pay the dues for 1903, as usual, to the Treasurer. A majority have done so, and it would not be just to make exceptions in cases of those who must necessarily

join the county organizations to retain membership in the State Society. The Council has not, and it has not the legal right to make any change in the laws of the State Society previous to their election. The dues for 1903 were due and payable at the time of the meeting in June, 1903.

The Council, by vote October 13, 1903, decided that societies applying for charter *prior to that date*, and paying $2.00 for members admitted (not previously members of the State Society), should receive credit of $1.00 on dues for 1904; and that all applying *after that date*, and paying $2.00 per member, should be credited in full for dues for 1904. This action was not intended to affect in any way members of the State Society prior to re-organization. The dues of such members should be paid as usual for 1903, and the same as other (new) members for 1904, *i. e.*, $2.00 prior to April 1, 1904. (See also "Organization Notes," Wisconsin Medical Journal for February, pages 583, 584.)

2d. *Reports*: Section 13,Chapter IX, By-Laws State Society, provides that "the Secretary of each Component Society shall forward its assessment, together with its roster of officers and members, list of delegates and list of non-affiliated physicians of the county, to the Secretary of this Society between the 1st and 10th of April of each year." Please make a new and correct report up to date. Include, if possible, the name of every physician in the county, with his personal record. Put on the membership roll only those who have paid their assessment.

3d. *Personal Records and Card-Index*: Make a renewed and vigorous effort to secure the personal record of *every* physician in your county, both members and non-members. (Send to the State Secretary for more blanks, if needed.) Copy these records upon the cards, and make your card-index a full and correct directory of the profession of the county up to date. When all are collected and copied, send the blanks to the State Secretary for the State Card-Index.

4th. *Membership*: Make a personal and special effort to include in your county membership, if possible, every physician in the county who is eligible, so that the showing at our first Annual Meeting in June, shall be as good as hard and persistent work can make it. Impress on all the fact that membership in the County Society is necessary to retain membership in the District or State Society, or in the American Medical Association.

5th. *Reports of Meetings, etc.*: Send prompt and full reports of all meetings, together with items of news concerning the profession of the county, both personal and otherwise, such as deaths, removals, etc., to Dr. A. J. Patek, Editor Wisconsin Medical Journal, 121 Wisconsin Street, Milwaukee, the official organ of the State Society.

F. E. WALBRIDGE, *President.*
W. T. SARLES, *President of the Council.*
S. S. HALL, *Treasurer.*
C. S. SHELDON, *Secretary.*

AN EXPRESSION ON REORGANIZATION.

An expression of opinion was requested of the officers and councilors of the State Medical Society of Wisconsin in re the reorganization plan now in progress and the following letters have been received. It is gratifying to see that there is general satisfaction on all sides.

Milwaukee, Wis., Feb. 17, 1904.

Editor Wisconsin Medical Journal: Replying to your letter asking my opinion of the reorganization of the medical profession, permit me to say that I believe medicine as a science has kept abreast of the rest of the world in the progress made during the past century, save in the matter of organization. No large institution composed of individuals can progress satisfactorily without a community of interest and harmonious mutual relations. I believe the present plan of organization will, when completed, join the medical men, as a unit, from the county organization to the national society, and in such a way that the advancement in the next few years will surpass that of any like period in the history of medicine; not perhaps in the line of discovery, but in the general advancement of the rank and file of the profession, by bringing them into closer touch with each other, harmonizing their views, advancing the general knowledge, and making the medical man in the community a more useful citizen.

Reorganization in Wisconsin is, I believe, advancing satisfactorily, and by June we hope to have every county organized.

F. E. WALBRIDGE,
President State Medical Society of Wisconsin.

Janesville, Wis., March 11th, 1904.

Editor Wisconsin Medical Journal: The reorganization of the State Medical Society as proposed by the American Medical Association will, I believe, be appreciated by the physicians of Wisconsin, and great benefit must accrue to every member by the establishment of various county societies.

Under the new plan our state organization will have a better standing with other similar associations throughout the United States, but in order to carry this to a successful issue we must have the cooperation of every reputable physician, first in the County, then in the State Society.

I heartily approve of the course taken by the society in making the WISCONSIN MEDICAL JOURNAL its official organ.

JAMES MILLS, First Vice-President.

Shullsburg, Wis., Feb. 10, 1904.

Editor Wisconsin Medical Journal: In reply to your request of Feb. 6, for an expression of opinion as to the working of the State

Society under the reorganization plan, I would say that until the State Society meets it is almost impossible to form an opinion as to whether reorganization is a success or failure, but judging from its effects upon this locality, should say it ought to be a grand success. Last May the physicians of Lafayette county met and organized a County Medical Society; they have met every three months since and have had a good attendance.

The papers read at these meetings are interesting and of real worth, the discussions are spirited and instructive. There should be some effort made to have at least some of these papers printed, for they will compare with those read at state, interstate and national gatherings. Last May was the first time the medical fraternity of Lafayette county met as a society. Every physician in the county is a member. The adjoining counties—Green, Iowa, and Grant—have since organized and have good meetings, with varied programs, papers, banquet, etc. Judging from our local experience reorganization is a grand success, and the future looks bright. There is one serious difficulty to be met and agreeably settled, and that is fees, one county charging fifty cents per mile, the other one dollar. This makes it hard for the dollar man when his practice extends into the fifty cent district. Would like to have an expression from your JOURNAL on the uniformity of fees throughout the state.

C. C. GRATIOT,

Second Vice-President State Medical Society.

Ripon, Wis., Feb. 13, 1904.

Editor Wisconsin Medical Journal: The great potential advantage of reorganization, it seems to me, is the increased unity of the profession, not only in Wisconsin, but in all the states.

The uniform organization of county and district societies and their relation to the State Society and the American Medical Association, will immensely increase the power of the profession.

We had a good State Society before, and it has steadily grown in numbers and in interest to the profession in the State. In twenty years we had increased from a small society of less than two hundred members to one of more than seven hundred, and the transactions published annually increased from a small pamphlet of 147 pages to a volume of 475 pages.

The quality of the work has improved with the rapid development of medical knowledge and the infusion of new and younger blood. The rapid increase of membership during the past half-year is an index of appreciation on the part of the profession of the new movement.

When the new machine is complete we expect it will run smoothly over the new road-bed.

SIDNEY S. HALL,

Treasurer State Medical Society.

Racine, Wis., Feb. 11, 1904.

Editor Wisconsin Medical Journal: Your note of the 6th at hand. The work in the first district has proceeded very satisfactorily. The physicians in each of the counties of the district seem unanimous in the opinion that the medical profession will get together in this reorganization in a manner to best further the interests of the profession. Unless the physicians are firmly united they can wield but little influence politically or otherwise against the various evils of Eddyism, Osteopathy, Dowieism, *et cetera*, with which they have constantly to contend. The reorganization in the first district is practically complete at this date.

JOHN MEACHEM,
Councilor 1st District.

Berlin, Wis., Feb. 25, 1904.

Editor Wisconsin Medical Journal: My reply to your letter of the 6th inst. asking for an expression of my views as councilor for the 2nd District, in regard to the working of the society under the reorganization plan has been delayed on account of my absence from home.

It is too early to say anything definite as to the effect of the new plan on the next meeting of the State Society. The attendance and enthusiasm of that meeting can only be the due reflex of the interest and enthusiasm of the individual members of the profession.

If the spirit manifested in my district obtains over the whole state, the June meeting will comprise the largest body of earnest, united, and enthusiastic Wisconsin medical men which has ever assembled in Milwaukee.

But, however successful the annual meeting may be, the greatest lasting good will be accomplished in the county societies.

Many men, especially those in the smaller towns and isolated districts, who have drifted carelessly along without membership in any organization, have been awakened and have just "found themselves." They have found that they not only receive benefit, but are able to give something in return at every meeting of the county society.

It is this phase of the new plan which best shows the wisdom of its originators. With one exception all counties in my district have been organized without any great effort on my part. Where I had expected apathy and indifference, I have met with hearty co-operation and support, so that my task, which I feared would be burdensome, has been a pleasure.

The printing of the proceedings of the county societies in the JOURNAL is, I think, most desirable. We like to know what is being done in our neighboring counties. We also like to see our own views expressed in print, and I regard it as a great incentive for us to do good work.

If possible, more space should be used for this purpose.

J. S. WALBRIDGE,
Councilor 2nd District.

Elroy, Wis., Feb. 9, 1904.

Editor Wisconsin Medical Journal: Referring to your letter of inquiry regarding the working of the State Medical Society under the new organization, would say that I am satisfied, after the organization is completed, that we will have more members than ever before and that the physicians throughout the state will be better organized as a body and will be felt politically more than heretofore.

Crawford and Richland are the only counties not yet organized in the 3rd district, and Crawford is now arranging to organize. The annual meeting will doubtless set many misunderstandings right.

C. S. SMITH,
Councilor 3rd District.

Fond du Lac, Wis., Feb. 9, 1904.

Editor Wisconsin Medical Journal: It is too soon as yet to see all of the benefits of reorganization, but enough has been shown to justify the course. In our district every county has a good, working society and nearly every doctor in each county, who is worthy, is a member of the local society. This could not have been accomplished without the new plan. We can see that there is less friction already in the working of the society, for the profession is coming closer together, is more of a unit. The ultimate success of the plan will depend upon the manner the local societies are kept up, and this, I think, will be accomplished if each councilor will but keep up the necessary supervision.

G. V. MEARS,
Councilor 6th District.

Manitowoc, Wis., Feb. 9, 1904.

Editor Wisconsin Medical Journal: There is no doubt that reorganization of the State Medical Society is an excellent proceeding. I have found but little if any opposition to it when the plan had been explained, and while I have given as much personal attention to the changes necessary in having counties properly organized, as I could, yet with that little I have found the spirit of the profession right, and in all but two counties in the district (8th) organization has been effected. One of these (Waushara county) will probably unite with Green Lake, and that leaves only Calumet, which, I think, has enough physicians of enterprise to organize soon.

There is no question of the benefits of organization, and with the WISCONSIN MEDICAL JOURNAL as the official organ, there can be but one outcome: a united profession for everything that is for the interests of the individual.

J. F. PRITCHARD,
Councilor 8th District.

Marinette, Wis., March 1, 1904.

Editor Wisconsin Medical Journal: In reply to your recent communication I have to say that I believe the reorganization plan is much in favor among the physicians of the Ninth District. Have heard practically no unfavorable criticism. Brown and Outagamie Counties have strong societies, Oconto and Marinette have smaller ones. In the smaller societies I find that it is quite difficult to get literary entertainments regularly. The burden of the work falls upon too small a number of men. This is especially so when the meetings are held monthly or bi-monthly. From 60 to 70 per cent. of the physicians in these counties are already members. The men from the smaller towns throughout the counties are rarely seen at the meetings.

Door and Kewaunee Counties I have not yet succeeded in organizing. I think, however, that as soon as I can find time to visit these counties personally I shall succeed in effecting an organization. I may combine the two counties. Personally I believe this one of the grandest works ever undertaken by the A. M. A., and sincerely hope that in the course of a few years 90 to 95 per cent. of all the worthy physicians in this district will have become members of our county societies.

T. J. REDELINGS,
Councilor, Ninth District.

Ashland, Wis., March 7, 1904.

Editor Wisconsin Medical Journal: County societies have now been organized in all of the thirteen counties in this district, with the exception of Forest and Florence, and just what I shall do with these counties I have not yet decided. I have not made a personal visit to them, and have not succeeded to any extent in getting a response from Forest County. Florence has but one physician, and he is willing to join any county in which we may see fit to place him. He, with Forest County, could have a medical society, providing we can get them all together in one place. This is somewhat difficult owing to the railroad facilities. It might seem objectionable to have so many small societies, but I have thought it best for each county to organize separately if it seemed that each could maintain an organization, and the inducement for maintaining an organization may be greater where the county societies may maintain their individuality. Wherever I have gone in this work, I have found a degree of enthusiasm which was very encouraging. It has occurred to me—as it no doubt has to others who have made a study of this work of reorganization—that the work of holding the members together and keeping up the societies will be more difficult than the work of organization, and in that fact I feel that the work of the councilors is destined to become the most arduous. I find that physicians generally take very kindly to any plan which offers them permanent good, but they are also wary about giving their support to anything of questionable value. When they are once in our County and State Medical Societies, I feel that we shall have no trouble in keeping them there; and if they can be

made to see that their individual interests are identical with those of the society, they will stay with us and become active members. It is my purpose to have every eligible physician in my district enrolled in the State Society before the June meeting.

Hoping this will serve the desired purpose and enable you to understand the status of the organization movement in the 10th district, I am Fraternally yours, J. M. DODD,
Councilor 10th District.

Hammond, Wis., Feb. 8, 1904.

Editor Wisconsin Medical Journal: Your favor at hand and noted. In reply I would say that since I completed the organization of the 11th district in October I have visited none of the county societies, nor have I had any communication with them directly, and only know of their work from what I see in the JOURNAL. Judging from this and from my observations when making my visits, I am of the opinion that the plan, in general, will succeed, and that the increase in membership will be very noticeable. It is too early to judge regarding the working of the State Society under the reorganization plan, for that can only be done in the light of history. That the results will be beneficial to the profession I firmly believe. I have noted that at many of the County Society meetings in December there was considerable done in the way of papers read and discussed—something of which heretofore we have seen little in several districts, and only in a few of the larger cities, and in some two or three district societies. I am a firm believer in organizing rural county societies into district societies, following railroad lines regardless of councilor districts. In this way the country doctor can meet with the loss of little time and with benefit. After county societies are organized throughout the state, I would have district societies organized, following railroad routes, disregarding other lines, and make these societies purely literary, relegating all laws, etc., to the county society, admitting without fee or constitution other than that of the county society. From these district societies I would take largely the digested work for the State Society. More mature plans will generally be evolved and in time a united profession will be the result. I am not disposed as yet to criticise aught of the plan. That some more changes may be necessary is very probable, but I desire a fair trial, and then careful pruning. The signs of the last twenty-five years have been pointing toward union—now it is an assured fact. I have every faith in its results. It will need encouragement and lots of work, but the results will pay in a union of power whose efforts will be put forth for the betterment of the people and for progress in every way.

Especially do I look toward political results, sanitation, etc. The effect of a solid professional front on a legislature too often given to recognition of charlatans and quackery, lax laws and illy conceived regulations, will be something long desired. E. L. BOOTHBY,
Councilor 11th District.

DIRECTORY OF COUNTY SOCIETIES.

COUNTY.	PRESIDENT.	SECRETARY.
Ashland	W. T. Rinehart, Ashland.	N. N. Glim, Ashland.
Barron-Gates-Polk	O. M. Sattre, Rice Lake..	I. G. Babcock,Cumberla'd
Bayfield	.....	J. B. Hicks, Washburn.
Brown	B. C. Brett, Green Bay..	W. T. Hagen, Green Bay.
Chippewa	C. A. Hayes, Chipp.Falls.	R. B. Cunningham,Cadott
Clark	.....	V. M. French, Neillsville.
Columbia	J. J. Howard, Columbus.	F. D. Bentley, Portage.
Dane	C. A. Harper, Madison..	R. H. Jackson, Madison.
Dodge	E. M. McDonald, B. Dam.	H. B. Sears, Beaver Dam.
Douglas	George Saunders.....	W. W. Pretts, Superior.
Dunn	E. H. Grannis, Menomo'e.	G. A. Barker, Menomonie
Eau Claire	J.V.R.Lyman,Eau Claire.	H. A. Fulton, Eau Claire.
Fond du Lac	J.H.McNeil, Fond du Lac.	Flora A.Reed,FondduLac.
Grant	J. Oettiker, Platteville..	P. L. Scanlan, Lancaster.
Green	Sam'l Moyer, Monroe.!.	Wm. B. Monroe, Monroe.
Green Lake	C. E. Thayer, Markesan.	B. E. Scott, Berlin.
Iowa	W. J. Pearce, Dodgeville.	S. P. Deahofe,Mineral Pt.
Iron	J.H.Urquhart, Iron Belt.	T. J. Hambley, Hurley.
Jefferson	Wm. W. Reed, Jefferson.	C. E. Lander,Johnson C'k
Juneau	J. B. Edwards, Mauston.	A. T. Gregory, Elroy.
Kenosha	G. T. Kimball, Kenosha..	A.VanWestriener,Ken'sha
La Crosse	F. C. Suitor, La Crosse..	C.H.Marquardt,La Crosse
Lafayette	E. S. Hooper, Darlington.	C.Lehnkering, Darlington
Langlade	I. D. Steffen, Antigo....	Frank I. Drake, Antigo.
Lincoln	W. H. Monroe, Merrill..	C. C. Walsh, Merrill.
Manitowoc	Louis Falge, Reedsville..	J. E. Meany, Manitowoc.
Marathon	D. La Count, Wausau...	H. L. Rosenberry,Wausau
Marinette	T.J.Redelings, Marinette.	A. T. Nadeau, Marinette.
Marquette	W.Thompson, Briggsville.	W. O. Dyer, Westfield.
Milwaukee	G.E.Seaman, Milwaukee.	A. W. Gray, Milwaukee.
Monroe	G. R. Vincent, Tomah...	C. M. Beebe, Sparta.
Oconto	.....	A. S. White, Gillett.
Oneida	C.D.Packard, Rhinel'der.	S. R. Stone, Rhinelander.
Outagamie	G. A. Ritchie, Appleton..	M. J. Sandborn, Appleton
Ozaukee	E. E. Couch, Pt. Wash..	.....
Pierce	Dr. Cotton, Prescott....	D.Woodworth, Ellsworth.
Portage	Galen Rood, Stevens Pt..	C.v.Neupert,Jr.,Stev's Pt.
Price	W. P. Sperry, Phillips...	A. D. Gibson, Park Falls.
Racine	W. S. Haven, Racine....	C. F. Browne, Racine.
Rock	W.H.Palmer, Janesville..	G. W. Fifield, Janesville.
Sauk	Chas. Gorst, Baraboo...	G. L. Cramer, Baraboo.
Shawano	W.H.Cantwell, Shawano.	H. W. Partlow, Shawano.
Sheboygan	O. J. Gutsch, Sheboygan.	H. C. Reich, Sheboygan.
St. Croix	E.L.Boothby, Hammond..	L. P. Mayer, Hudson.
Taylor	E. LeSage, Medford.....	J. H. Francis, Medford.
Vernon	.....	C.H.Trowbridge, Viroqua
Walworth	.....	W. A. Loops, Darien.
Washb'n-Sawy'r-Burn'tt.	J.B.Trowbridge, Hayw'd.	E. R. Hering, Shell Lake.
Washington	H. Blank, Jackson.....	G. A. Heidner,West Bend
Waukesha	B. M. Caples, Waukesha.	A. J. Hodgson,Waukesha.
Waupaca	L. H. Pelton, Waupaca..	J. F. Corbett,Weyauwega.
Winnebago	G. M. Steele, Oshkosh...	S. B. Ackley, Oshkosh.
Wood	O. T. Hougen, G. Rapids.	F. Pomainville, G.Rapids

LA CROSSE COUNTY MEDICAL SOCIETY.

At the regular monthly meeting of the La Crosse County Medical Society on March 3, the resolutions sent out by the Legislative Council of the American Medical Association were adopted and the secretary was instructed to forward copies to each of our Senators and to the Member of Congress from our district.

C. H. MARQUARDT, M. D., Secretary.

LAFAYETTE COUNTY MEDICAL SOCIETY.

At the annual meeting of the Lafayette County Medical Society held on Jan. 12, three excellent papers were presented; one by Dr. D. N. Hogue on "Preventive Medicine," the subject of "Instrumental Delivery" was treated by Dr. Huberthal, while Dr. Hooper considered "The Causes of Diabetes."

The election for the ensuing year resulted as follows: President, Dr. C. C. Gratiot, Shullsburg; vice-president, Dr. D. N. Hogue; secretary and treasurer, Dr. C. F. Lehnkering, Darlington; censor, Dr. O. L. Hansen; delegate, Dr. E. S. Hooper.

The next meeting and banquet will be held at Darlington, April 12, 1904.

C. F. LEHNKERING, M. D., Secretary.

MARINETTE COUNTY MEDICAL SOCIETY.

The regular meeting of the Marinette County Medical Society was held on March 9, at Hotel Marinette, and the following program was presented: Report of a case of Fibro-Lipoma of the Omentum, Dr. R. E. Marriner, Menominee; Reminiscences of Thirty Years of Practice, Dr. H. E. Mann, Marinette.

A. T. NADEAU, M. D., Secretary.

MILWAUKEE COUNTY MEDICAL SOCIETY.

The regular monthly meeting was held at the Deutscher Club, January 15. 57 members were present, President G. E. Seaman in the chair. Luncheon was served at 9 o'clock. The meeting was designed to be largely a social one with informal discussions on matters of general interest to the profession. Opinions advanced in the discussion on fees were very interesting, but no action was taken on the establishment of a fee bill. The establishment of a Detention Hospital for emergency insane cases was discussed by Dr. Richard Dewey and others, and a committee was appointed to secure the establishment of such a hospital. It was the unanimous opinion of the members present that the Isolation Hospital be not removed from its present location, and a committee was appointed to secure that result. Discussions upon post-mortem fees in this county developed the fact that $5 has been the regular county fee. A committee was appointed to consider this matter and secure, if possible, a larger fee.

The regular monthly meeting was held February 12, 1904, in the school lecture room of the Public Museum Building, 46 members being present, President G. E. Seaman in the chair. 12 new members were elected.

The "Location of the Isolation Hospital Committee" reported a set of resolutions favoring the present site for the new hospital. This report was adopted and the committee instructed to continue its endeavors.

Dr. G. P. Barth introduced resolutions which were carried unanimously, asking that the Board of Supervisors of Milwaukee County establish a Detention Hospital for emergency insane cases at the Johnson Emergency Hospital.

Dr. A. W. Rogers read an interesting paper on "Graves' Disease and its Relation to Psychoses," reporting 13 cases. He came to the conclusion that there is no psychosis peculiar to this disease, but that three-fourths of all cases show psychosis and that the remainder are neurotic. His paper was freely discussed by Drs. P. H. McGovern, W. Becker, Lemon and Patek.

Dr. R. G. Sayle read a paper on "The Ordinary Surgery of Obstetrics," giving many practical points of value. Drs. Stoddard, Fish, Hay and Burgess entered into a discussion.

A. W. GRAY, M. D., Secretary.

OUTAGAMIE COUNTY MEDICAL SOCIETY.

A joint meeting with the Appleton Medical Club was held at the Sherman House, Appleton, on March 2.

Dr. Robert Leith read a paper on "Obstetrics," and Drs. Mills, Brooks and Sanborn presented some very interesting clinical material. Dr. Ritchie demonstrated a carcinoma of the cecum which he had recently removed by resection of about eight inches of the gut.

The election of officers resulted as follows: President, Dr. C. D. Boyd, Kaukauna; vice-president, Dr. N. P. Mills, Appleton; secretary and treasurer, Dr. M. J. Sanborn, Appleton; censor for three years, Dr. Robert Leith, Appleton. It was decided to hold the next meeting at Seymour, June 1.

After the meeting the Appleton Medical Club entertained the County Society at a banquet at which Dr. Robert Leith acted as toastmaster. Drs. G. A. Ritchie, J. S. Reeve, J. H. Fuller and T. T. Beveridge responded to toasts and all present voted the occasion a most enjoyable one, long to be remembered.

M. J. SANDBORN, M. D., Secretary.

ST. CROIX COUNTY MEDICAL SOCIETY.

The quarterly meeting of the St. Croix County Medical Society was held at Hudson, March 8, the president, Dr. E. L. Boothby, presiding. A number of interesting papers were read and discussed by the members. The meeting was well attended and all participated in the program. Five applications for membership were received.

The next meeting will be held at New Richmond, May 31.

LAURENCE P. MAYER, M. D., Secretary.

MILWAUKEE MEDICAL SOCIETY.

Meeting of February 9, 1904.

Owing to the absence of the presiding officers, Dr. A. W. Gray was called to the chair.

Dr. Rogers presented a report of "Four Cases of Intercurrent Erysipelas in Melancholia, with Recovery or Great Improvement in Each Case." He reported three cases in which there was complete cessation of melancholic symptoms and one case greatly improved, as the result of intercurrent erysipelas.

Discussion by Drs. Beffel, Wingate, Studley, Myers, Hitz, Washburn, Foerster and Gray. The closing remarks of Dr. Rogers favored the theory that the results were due to a specific action of the erysipelas virus.

Dr. Fiedler gave an exposition of the methods of the Milwaukee Health Department. He spoke of the desirability of making the statistics as complete and accurate as possible. An explanation of the methods employed to prevent the spread of communicable diseases was given. He urged the physicians to use the laboratories more freely and explained that laboratory products such an antitoxin and vaccine virus would be furnished free of expense where it was necessary.

The subject was discussed by Drs. Patek, Washburn, Myers and Foerster.

H. E. DEARHOLT, M. D., Secretary.

SOCIETY OF GERMAN PHYSICIANS OF MILWAUKEE.

At the meeting of February 6th, Dr. L. Frank reported a case of leukoplakia of the center of the tongue which was cured with thermocautery. Dr. A. J. Puls demonstrated two fibroids of the uterus, enucleated bluntly. Dr. C. Reinhard read a paper on a case of thrombosis of the Sylvian artery, apparently due to endarteritis. He observed the gradual development of hemiplegia, which was complete after a course of eight days. Dr. C. Zimmermann spoke on ocular disturbances in myxedema, with report of a case, recently seen, in which, however, the impairment of sight was not due to an affection of the optic nerve, as occasionally observed in this disease, but to an error of refraction. Under treatment the symptoms of myxedema subsided rapidly.

C. ZIMMERMANN, M. D., Secretary.

CURRENT LITERATURE.

SURGERY.

F. E. Walbridge, M.D., H. A. Sifton, M.D., F. Shimonek, M.D.

Prostatic Hypertrophy.— W. B. JONES (*N. Y. Medical Journal*, Nov. 14, 1903) urges the perineal route for prostatectomy, giving details of the operation. He claims for the operation less time, less loss of blood and less shock than any other. The prostate can be removed completely or any part of it. If the middle lobe only is giving trouble, it can be removed without disturbing the rest of the gland. Stricture of the urethra can be cured at the same time.

The drainage, if there be cystitis, is complete and gives the best possible treatment for the condition. It gives the surgeon the opportunity of treating every complication that may exist. (F. E. W.)

The Permanency of Cure after Gall-Stone Operation.— A. SCHATT, (*Dissert.*, Heidelberg, 1903) has analyzed 180 cases of gall-stone operation with

special reference to the reproduction of biliary calculi after surgical intervention.

He shows that those cases which have recurrence of pain, more or less characteristic of the passage of gall-stones, subsequent to operation may be generally traced to various complications having little or nothing in common with cholelithiasis, as for instance, diseases of the female generative organs, movable kidney, enteroptosis, etc. He says that stones, which are frequently overlooked during an operation, may cause an attack of genuine hepatic colic; but he seems to demonstrate the great rarity of the reproduction of gall-stones.

Adhesions, with kinking or compression of the biliary passage, are very frequently accountable for pain, which, by its great resemblance to true hepatic colic, might lead one to believe that new gall-stones have been generated. (F. S.)

Pathology and Therapeutics of Strangulated Hernia.—A. BUNDSCHUH (*Dissert.*, Heidelberg, 1903) lays considerable stress on the dangers of taxis, and by way of emphasis he recites two cases of strangulated hernia, in each of which perforation of the intestine followed its use. In the first case, taxis was utilized by a physician, who apparently succeeded in reducing the strangulation; but the symptoms of strangulation continued, in addition to which, peritoneal infection was superadded. Section revealed perforation of the intestines, etc. In the second case, the patient herself reduced the hernia, producing a similar array of pathological lesions. She, being the operator and patient, certainly could not use inordinate force. In view of the almost uniform success of operative intervention some surgeons have entirely discarded taxis.

(It is to be borne in mind, that strangulated hernia differs from incarcerated or obstructed hernia. Taxis in these last conditions is usually all that is needed.) (F. S.)

The Diagnosis and Treatment of Acute Pancreatitis.— DR. GEORGE WOOLSEY (*Annals of Surgery*, November, 1903) says, "In the following remarks, I refer only to the severe forms of acute pancreatitis."

Severe acute pancreatitis presents quite a characteristic picture, more often found in males from forty to sixty. The attack is sudden, with severe epigastric, colicky pain, later becoming general, severe vomiting and distention of the abdomen, especially the upper part. The abdomen is tender and rigid on pressure. Collapse is marked, face and extremities cold; temperature low, often subnormal, pulse small and rapid. Death, in severe cases, usually occurs in four or five days. Acute hemorrhagic pancreatitis usually occurs in connection with corpulence, alcoholism, gall stones, gastroduodenal catarrh, traumatism and arterio-sclerosis.

The disease is unquestionably an infection. The two conditions with which acute pancreatitis is most likely to be confounded are intestinal obstruction high up and perforated duodenal or gastric ulcer.

Woolsey thinks the best results are obtained by immediate operation. Local anesthesia can be used, and prolonged operation should be avoided, simple drainage with gauze giving the best results.

In the severe cases, the diagnosis is easy with the above mentioned symptom-complex and etiological factors. It is only likely to be mistaken for conditions which also require early operation. The finding of fat necrosis at the operation confirms the diagnosis. (F. E. W.)

HYGIENE AND PUBLIC HEALTH.

U. O. B. Wingate, M.D., W. C. Bennett, M.D.

Government Investigation of Vaccine Virus—It may not yet be generally known that a law has quite recently been enacted by Congress providing for a more or less general supervision by the Public Health and Marine Hospital Service of the production and sale of vaccine virus. This will be a great step in the right direction, and as soon as the supervision can be put into operation, which will be very soon, we can feel more safe in the use of this important prophylactic. The following are excerpts from the summary and conclusions of Rosenau in his investigations as a preliminary work along this line, presented in the Hygienic Laboratory Bulletin, No. 12, for March, 1903:

We examined the vaccines of ten different manufacturers during the period of more than a year. All the samples examined were purchased on the open market, care being taken to buy unbroken original packages from reliable pharmacists who kept the product under proper conditions of light and temperature. With a few exceptions, the vaccine was examined before the time limit expired, if the time was given by the manufacturer.

Of 190 dry points examined we found an average of 4,354 bacteria per point. A number of these points contained from 15,000 and one as high as 44,000 organisms.

Of 244 tubes of glycerinated virus examined we found an average of 1,742 bacteria per tube. A number of these capillary tubes contained over 10,000 bacteria, and one as high as 30,000. This is, of course, much more than carefully prepared glycerinated virus should contain.

We found the pus cocci, and other bacteria, pathogenic for laboratory animals, in both the dry points and the glycerinated virus.

We have demonstrated that some of the glycerinated virus marketed during the winter of 1901-2 contained an excessive number of bacteria, which decreased notably after a few weeks, indicating the sale of a "green" or unripe product; that is to say, the virus was not glycerinated a sufficient length of time before it was sold.

It was also plain from our studies that too much confidence was placed by the producers in the germicidal power of glycerine.

Tetanus may become a contaminating element of vaccine before it leaves the heifer. During the period of three to five days which elapses between the vaccination of the heifer and the removal of the virus there is opportunity for tetanus to find a lodgement in the eruption on the heifer's body surface, provided tetanus is present in the stall or stable surroundings of the animal.

In looking for tetanus in vaccine virus it is best to make cultures first and study the growth for end spore-bearing rods and then test the effects of the culture in animals. (U. O. B. W.)

Sulphurous Acid as a Disinfectant—DRS. CALMETTE AND ROLANTS (*Revue d'Hygiene*, May 20, 1903) discuss the question of the efficacy of sulphurous acid as a disinfectant. On account of the discordant opinions arrived at by different investigators of late years, they determined to undertake new lines of studies with a view of harmonizing the discrepancies, and of elucidating the reason of the wide divergence of opinion as to the efficiency of this gas, arriving at the following conclusions:

"Sulphurous gas produced by the combustion of sulphur in air or in Clayton's furnace possesses a disinfectant power with regard to certain pathogenic microbes which are relatively easy of destruction, such as the streptococcus of erysipelas, and the bacillus of typhoid fever, even when these microbes are placed under the best conditions of resistance, that is when they are protected by an envelope of dry albumin. But one should not count upon its absolute efficiency in attacking resistant pathogenic organisms, such as the bacillus of diphtheria, bacillus tuberculosis, and, above all, the sporing microbes. The disinfectant properties of sulphurous gas are due to the presence in it of sulphuric anhydride, which is always present in greater or less amount. The largest proportion, and consequently the best results, attained by the burning sulphur in the Clayton furnace, are due to the fact that the gas thus obtained is richer in sulphuric anhydride than that obtained by combustion of sulphur in air. The sulphurous acid gas derived from the volatilization of the liquefied gas in siphons, possesses no disinfectant value even in a strength of 22 per cent.; and it should consequently be entirely abandoned as a disinfectant for localities infected with pathogenic micro-organisms. To obtain efficient disinfection by sulphurous gas, where pathogenic micro-organisms are in question, it is necessary to be certain that the air is charged with, for at least two hours, 8 per cent. of the gas *ad minimum*. Every time one attempts disinfection by sulphurous gas it is indispensable that he determine by simple yet rigorous methods of control the mean concentration of the gas, the distance of penetration across permeable objects capable of harboring pathogenic micro-organisms, and the bactericidal efficacy of the gas with regard to the particular micro-organisms which it is desired to destroy; and no disinfection should be carried out without this triple control. When employed under all the conditions outlined above (of which the most important are, a concentration of 8 per cent. *ad minimum*, an exposure of at least two hours, and a sufficient agitation of the air to ensure penetration through the whole permeable mass capable of harboring pathogenic micro-organisms or animals, especially insects), sulphurous gas can be used as a disinfectant; and it should still be retained, but it should not be substituted for formalin, which, it would seem, ought to be the disinfectant of election for apartments. But sulphurous gas deserves to be employed wherever large spaces (such as ships, railroad coaches, and above all, granaries) are to be disinfected. It finds its especial field where one wishes to destroy both germs easy of destruction (e. g., the germs of plague, cholera, typhoid fever, and erysipelas), and insects and rats, on which formalin does not exercise a noxious influence. As Vallin has said: 'It is not necessary, by reason of certain exceptions which we do not deny, to depreciate unduly the value of sulphurous acid, which is, in truth, one of the most efficacious, the most economical, and the most easily applied agents that we possess.'"

(U. O. B. W.)

THERAPEUTIC NOTES.

"KUGLOIDS" IN GRIPPE, CATARRHAL PHARYNGITIS, BRONCHITIS, ETC.

The following trio of internal remedial agents may be used with confidence:

R Creosoti Benzoatis .....min. 1
Eucalyptoli Benzoatis .....min. 1
Quiniae Glycero-phosph. .....gr. ½
Misce fiat sol. sec. artem. (Dispense in capsule.)

These capsules are, for brevity, prescribed under the name of "Kugloids," so-called after Dr. Kugler of Paris, author of the formula.

1. *Quininc Glycero-phosphate.* Nerve Tonic; Protoplasmic Regenerator; Antipyretic; General Tonic.

2. *Creosote Benzoate,* Stimulating Expectorant; Diuretic; Antiseptic; Anti-Catarrhal.

3. *Eucalyptol Benzoate,* Antiseptic; Antispasmodic; Increases mucous secretions.

Tuberculosis of the lungs is probably the most exhausting of all diseases, and the most difficult to arrest, because the bacillus which forms the toxic ptomaines that sap the patient's vitality, is surrounded by an impregnable wall of connective tissue that shuts off all approach from the blood current. However, it is not only the tubercle bacillus that is at work undermining the constitution, but the staphylococcus and streptococcus, which linger more superficially in the mucous membrane and around the walls of cavities, producing a septic condition that we call the mixed infection and which is accountable for untoward results and neurasthenic conditions.

Influenza, or "Grippe," is a specific, epidemic, and contagious disease of rapid diffusibility, the cause of which is generally admitted to be a small cocco-bacillus discovered by Pfeiffer in 1892.

This disease is prone to a mixed infection with the streptococcus and staphylococcus, thus unloading large quantities of toxines in the system.

The first and most important feature then, after the invasion, is the germ, and this calls for an antiseptic; the pyrexia, night sweats, nervous symptoms and pain are due to the accumulation of the products of inflammation and toxines. These are first prevented from further elaboration by arresting the process of inflammation and killing the germ that produces them; then such material as remains must be filtered out from the blood through the bowels and kidneys, by means of purges and diuretics. The accumulations in the air passages will be removed reflexly by coughing, aided by Huxley's Antiseptic Pastilles and stimulating expectorants, and the irritated mucous surface must be soothed and gently stimulated to produce their natural secretions, so that an harmonious interchange between the air and blood can take place in the alveoli. After all these things have been accomplished, the nervous system must be toned up, the broken down tissues rebuilt, and the exhausted leucocytes rejuvenated.

In "Kugloids" we have a remedy combining all the factors necessary for such results, and clinical testimony upholds this theoretical exposition most satisfactorily.

In Grippe, it relieves the pains promptly, reduces the fever, takes away the general feeling of lassitude, and tones up the nervous system.

Resolution in Bronchitis takes place much sooner than usual, and in Pneumonia the temperature can be reduced 4 degrees in twenty-four hours; the areas of dullness and bronchial breathing rapidly diminished, and free and easy expectoration established phenomenally early.

The dose varies according to the severity of the disease. In Grippe one Kugloid every hour can be administered, in Bronchitis six to eight daily, while in Pneumonia and Phthisis ten to twelve can be given in the twenty-four hours.

When the hepatic cells themselves become atrophic and lose their nerve tonicity, and refuse to respond to nature's mandate, of secreting bile, then we have a group of symptoms not unlike those of a diabetic, but the results of which would be quite different.

In this condition we have found nothing that proves itself an ideal more than "chionanthus," and we have an ethical preparation, which you all know, that has proven itself a perfect God-send in this condition, and that product is "chionia." Before the hepatic cells become atrophic and hardened, there is a stage in which the liver becomes engorged, congested, hypertrophic, and in this condition we have hepatitis, an inflammation of the cells and connective tissue, and if this continue, then the liver breaks down, atrophies and hardens. Now, chionia does not act like any other laxative or hepatic stimulant, but instead of producing a severe catharsis, it works on the inflamed cellular tissue, bringing back the liver to its former physiological condition, allaying all inflammation, and gently stimulating the hepatic cells to perform their duty. And when we add nux vomica to this ideal hepatic stimulant, we have a tonic for the sluggish liver that cannot be equalled by any other remedy.—*Extract from a paper entitled "Indigestion, an Etiological Factor in Diabetes," read before the Medical Association of South Carolina, by Dr. J. Will McCanless.*

TONSILITIS.

Sod. Benzoat ..... 1 oz.
Ex. Cascara Sagrad. fl ..... 1 oz.
Tongaline q. s. ad ..... 6 ozs.

M. Sig.—A teaspoonful every two to four hours.

RHEUMATIC DYSMENORRHEA.

Tr. Cimicifugæ ..... 2 ozs.
Tr. Stramonii ..... ½ oz.
Tongaline ..... 4 ozs.

M. Sig.—A teaspoonful in water at meal times.

CHRONIC RHEUMATISM IN CACHEXIA.

Potass. Iodid ..... ½ oz.
Ol. Morrhuæ ..... 3 ozs.
Tongaline ..... 3 ozs.

M. Sig.—A teaspoonful every four hours.

RHEUMATIC DYSMENORRHEA.

Am. Hydrochlor ..... 2½ ozs.
Tr. Stramonii ..... ½ oz.
Tr. Cimicifugæ ..... 1 oz.
Syr. Glycyrrhizæ ..... 2 drms.
Tongaline ..... 6 ozs.

M. Sig.—Teaspoonful three times a day.

THE WISCONSIN
MEDICAL JOURNAL

APRIL, 1904

DIABETES MELLITUS.*

BY W. H. NEILSON, M. D.,
MILWAUKEE.

In presenting to you the subject of Diabetes Mellitus, I well know that my best efforts can only be expended in threshing over straw that has been flailed many a time, but if in the winnowing I can discover some grain of forgotten truth or remove another from its enveloping chaff, our time will be well spent.

Diabetes mellitus is such a complex disease presenting so many problems and has such a voluminous literature, that any attempt at collecting what is known of it, resulting in its presentation in a concise and condensed manner is valuable as a mental discipline, and the result, if in any degree successful, may be helpful in determining rational treatment.

It is to be regretted that notwithstanding the large amount of labor expended upon the subject by scientists of wide-world reputation, we are still in the dark in regard to many of the phenomena of this disease. Some facts in connection with it, however, are well established and are matters of common knowledge. We know that it is a disease in which glucose is constantly associated with the urine; that it is usually increased by the administration of carbohydrates, and, as a rule, the urine is excessive in quantity and of a high specific gravity and that there is great appetite, thirst, and digestive disturbance. We know considerable about the sources of grape sugar in the blood, and can trace the polysaccharid starch molecule as it is split into soluble disaccharids and monosaccharids, into the portal circulation, where it is converted into glucose, to the liver, where it is seized

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 5th, 1903.

upon by the liver cells and converted into the polysaccharid glycogen, which is fixed in a loose combination with the albumen of the cells where it is stored only to be reconverted into glucose as the maintenance of the normal glucose percentage, 0.18-0.2, in the blood demands; that thence it is washed away to the muscle cells and leucocytes to be used by them in the process of metabolism, giving rise to heat and energy, the surplus being stored in these structures, especially in the muscle cells, as glycogen, to be given off as occasion demands, being held in reserve against the day when there may be a shortage in carbohydrates.

We know also that should there be an excess over and above the capacity of the storage cells and the necessities of kinetic force, this is seized by the fat cells and compressed into fat, saved also against the day of necessity. Other carbohydrates ultimately meet the same fate.

Experiments have also determined that an excess amount of sugar, grape, cane, milk or fruit, ingested in a short time, will appear in the blood in the form in which it is taken, producing a glycemia and resulting glycosuria, saccharosuria, lactosuria, etc. While normally but ½ decigrams, an unappreciable amount of glucose, are found in a litre of urine, the flooding of the blood with glucose in a healthy individual from the ingestion of starch is an impossibility, because it requires a considerable time to digest it, and, should glucose appear in the urine after the partaking of a considerable or any amount of starch, it would be strongly suggestive of diabetes mellitus.

So much of the history of the mutations of the carbohydrates which play so prominent a rôle in the disease under consideration is pretty definitely known. What condition, however, determines the presence of glucose in the urine of a diabetic patient is not so plain, inasmuch as we are not yet definite in our knowledge of the etiology of the disease affecting him. Experimentally, sugar is found after severe shock to the nervous system, as in the celebrated figure of Claude Bernard, destruction of various sympathetic ganglia, blows upon the back of the head, etc. It is also found after ligature of the common ducts, ablation of the pancreas, poisoning by phloridzin and other poisons. Clinically, it is found associated with tumors of the brain, disease of the cord and sympathetic ganglia, mental shock and disturbances, disease of the liver and pancreas, gout, goutiness and obesity, narcosis and various other poisonings, but lesions are not constant with perhaps the exception of the condition of the pancreas which has not yet arrived at the dignity of a positive lesion in every case. Several theories have been advanced for the phenomenon of

glycosuria: In piqûre it was found that the liver rapidly loses its glycogen, hence a glycemia and consequent glycosuria. It has also been maintained that interference with the glycogen store houses, *viz.*, the liver, muscle, glands and leucocytes, in such a manner as to lessen their capacity, as through disease, would result in the same condition, but the fact that the liver can be extensively diseased and still no glycosuria result, is somewhat opposed to any such supposition. Again, incompetency of the renal filter is argued, this being the case after phloridzin poisoning and the flooding of the blood with carbohydrates, and the question is asked—Why not after other poisons as well? That question still remains to be answered. It has also been suggested that as a result of intestinal indigestion, which is so common with diabetes, some ferment enters the blood which in some way interferes with carbohydrate metamorphosis, and finally that some influence residing in the blood inhibits the cells from consuming the glucose molecules. In permanent glycosuria or diabetes mellitus, this last mentioned theory would seem to obtain, for by it we can explain not only the glycosuria but the lessened temperature and the greatly diminished respiratory quotient. What the causal relationship is between gout, goutiness, obesity, and diabetes mellitus we do not know, but we do know that in them we also have deficient oxidation, and that hygienic, dietetic, and medicinal treatment, calculated to increase metabolism, benefits each.

For some years the belief has been growing, that there is some substance in the blood which acts as a splitter of the carbohydrates into alcohol and carbon dioxid, thus rendering it of easy combustion. This belief has now reached a certainty. Whence the source of this substance, and what its character? Its constant and unvaried action in health argues a constant source of supply, and not one dependent upon the vicissitudes of digestion which is so easily affected. One must look, therefore, for an organ or organs capable of giving such a supply. The fact that the destruction of the pancreas invariably leads to complete diabetic symptoms, and the further fact that autopsies of diabetic patients showed involvment of that organ, leads to the suspicion that it was intimately concerned in the production of this glucose splitting substance. That this was not in the pancreatic juice, was evident from the fact that obliterating the duct is not followed by diabetic symptoms, but experiments resulting in a productive inflammation brought all the characteristic symptoms.

Then did pathologists and physiologists turn their attention to the Islands of Langerhans, which are bunches of lymphoid tissue surrounded by the acini, having no ducts, but being in intimate relation

with many convoluted capillaries. It was found that when these bodies had undergone destructive changes, and then only, that diabetic symptoms supervened. Thus was established with reasonable surety the causal relationship between certain cases, at least, of diabetes mellitus and disease of the Islands of Langerhans.

It is supposed that the secretion of these glandular bodies is taken up by the blood, and its action is that of splitting up the molecules of sugar so that the cells may take hold of them. Its action is analogous to that of the ferment produced by the yeast cell, hence its name—glycolytic enzyme. In this connection the experiments and observations of Opie, Flexner, Von Noorden, Herzog and others, are very

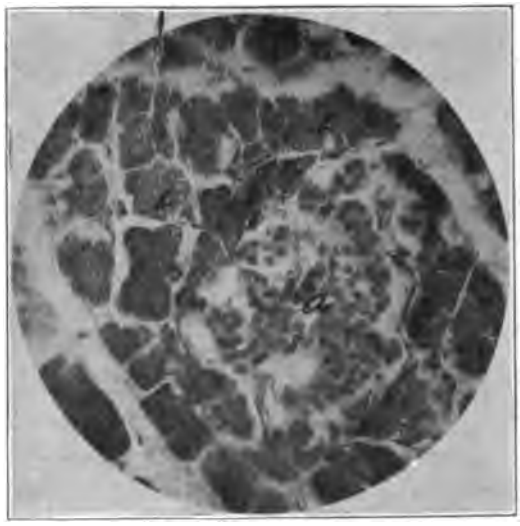


FIG. I. NORMAL PANCREAS.

a. Island of Langerhans, showing normal nucleation.
b. Acini in active secretion.

interesting. They well repay a careful study and go to show that the evidence is accumulating, that diabetes mellitus is a pathologic entity, whose seat is in the Islands of Langerhans.

It has yet, however, to be shown that the association of nerve disturbances and degenerations, obesity, gout, goutiness, and disease of the liver, are simply complications of or dependent upon the same underlying causes, before we can ascribe to destructive changes in the Islands of Langerhans the dignity of being the exclusive cause of diabetes mellitus. This will require still further careful research, but we have many enthusiastic workers in the field so that we can confidently look forward to more light upon this subject in the near future.

I here present micro-photographs made for me by Dr. Wm. F. Becker, showing a normal Island of Langerhans in the one, and in the other, the inflammatory invasion with destructive changes, the one specimen having been taken from a diabetic patient.

We have next to consider symptoms of the disease which are so common that your time need not be taken up with a lengthy description. We are all familiar with the classical symptoms of polyuria, high specific gravity of the urine, the varving percentages of the sugar, its constancy, the thirst, the great appetite, the digestive disturbances, the loss of weight, the increasing weakness, the neuralgias and the neuritis simulating tabes. We are accustomed to the dryness and red-

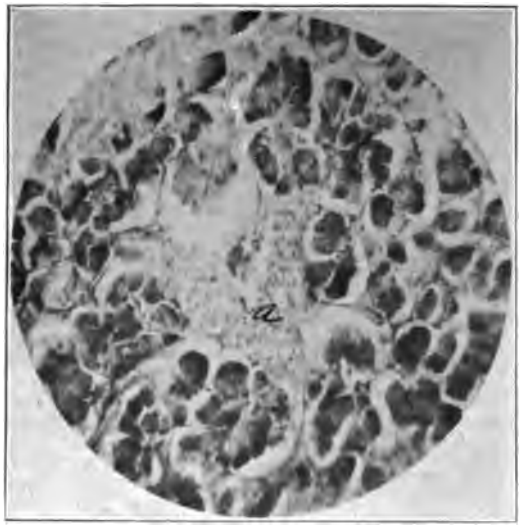


FIG. II. PANCREAS TAKEN FROM DIABETIC SUBJECT.

The organ shows a slight general fibrosis and a very marked degeneration and fibrosis of Langerhans' Islands. a. Island of Langerhans, entirely devoid of nuclei.

ness of the tongue, buccal and pharyngeal surfaces, the burning sensation about the meatus urinarius and the genital excoriations, the dryness of the skin and the various infections of it. We all dread the gangrene, the abscesses, the purulent otitis media, and the purulent infiltrations of the structures of the neck, and we all look with fear upon any simple infectious bronchitis, believing coma to be in sight. But the symptoms are not always classical, and we may be thrown off our guard. Our fleshy man may have no symptoms to point to the disease, whilst amongst the gouty, overfed, an amount of sugar in the urine is looked upon as salutary, rather than otherwise. In some, we have the disease extending over a period of many years without serious inconvenience. In others, a few weeks only is sufficient to bring

about a fatal issue. Nor does the age of the person invariably determine this, although generally speaking, an individual who is past 45, and who is moderately fleshy, has a good prospect, as far as length of days is concerned. In youth, especially if associated with obesity, the disease runs a rapidly fatal course.

Two cases in young boys during the past year were of interest to me. The one, aged 16, well built, working in a mill, complained for about two weeks of weakness, when he was obliged to take to bed. Dullness of intellect rapidly supervened, which deepened into coma, death resulting in three weeks from first complaint. The urine was copious, loaded with sugar, and there was the characteristic loss of reflexes. I am indebted to Dr. Kaumheimer for seeing this case.

The other was a lad 15 years of age, 6 ft. 2 in. tall, weighing about 130 pounds, slight but active and unusually intelligent. He came to me because of a larger quantity of urine passing. He had a stumbling gait, loss of knee jerk, neuralgic pains, urine with specific gravity of 1040, 4 per cent. sugar, constipation, intestinal indigestion, dryness of mouth, intense thirst, and great appetite. Yet this boy gained in weight and strength, lost much of his thirst and his enormous appetite, passed through a severe tonsillitis and later a facial ervsipelas, went deer hunting, lived on corn bread and molasses for some weeks, was exposed to a snowstorm for several hours, and lived for a year and a half after first presenting himself, finally developing gangrene, abscesses, otitis media, infiltrating pus, an accumulation of which in the neighborhood of the larynx caused death by suffocation when rupture took place.

In this case a trial of a week on a carbohydrate free diet resulted in bringing the percentage of sugar down from 10 to 7 per cent., but his weakness was greatly increased. Later, when the utter uselessness of treatment was apparent, he was allowed all the carbohydrates he craved for, and still the percentage did not rise above 10. This case was further interesting in the pronounced atrophy of the skin which occurred in parallel stripes transversly across the back and above and below the knees. In these boys the disease certainly presented very diverse pictures.

We cannot say very much about prognosis. As a rule, in the young it is a rapidly fatal one, while in those of middle life and fairly fleshy, it is good, as far as time is concerned, but every case is a law unto itself, and none permanently recover. We believe that the majority of these cases are influenced by treatment, which is to be divided into hygienic, medicinal and dietetic.

The principles underlying the treatment are those of promoting oxidation, that a greater amount of sugar be consumed (for sugar the blood will have from some source, even from the fat of the body), the lessening of the amount of carbohydrates ingested, and the substitution of its caloric value.

The first indication is met by the hygienic methods employed to bring about good nutrition, and such medicines as are supposed to stimulate the metabolic functions of the body, preserve the digestive tract in as nearly normal condition as possible, and neutralize the various acids which are the results of faulty digestion and metabolism, and which conspire to reduce the alkalinity of the blood.

To fulfill these requirements we have the various bitter tonics, the acids, and antiseptics. It is surprising how a judicious use of these with a moderately restricted diet will lessen the amount of sugar and increase the patient's well being. Opium also has a place in reducing the sugar and lessening the nervous symptoms.

Personally, I have had the greatest satisfaction from the antiseptic (so-called) treatment of the digestive tract, with the use of arsenic, preferably a 1 per cent. solution of bromide of arsenic. The regulation of the diet presents the greatest trouble. How best to supply the needed caloric values, and at the same time give the cells concerned in producing the glycolytic ferment a rest, in the hope that they may recover, is not easily answered. That the organism does recover for a time its ability to consume carbohydrates after a more or less complete freedom from their ingestion, is a clinical fact, and warrants us in making the trial in every case. We furthermore observe that in many cases the patient's well being is enhanced thereby.

From the albuminoids sufficient carbohydrates cannot be formed to keep up the normal sugar percentage, and to prevent the patient from drawing too freely on his own fat for the manufacture of sugar, it is necessary to feed him fat in abundance with his albuminoids, thus supplying his needs and keeping up the caloric values. Clinically it is found necessary in the majority of cases to allow some carbohydrates in the form of potatoes or bread, or else he will rebel. Rebellion, however, will not be so likely if he be allowed fat in the form of butter, cream, bacon, etc. Complications must be treated as they appear, and coma is probably best averted by large doses of sodium bicarbonate. Normal salt solution is used in coma, but when a patient reaches that stage, there is very little but a rapidly fatal issue to be expected.

To sum up: diabetes mellitus is a disease in which there is interference with the consumption of sugar; that this is due to the absence in the blood of a glycolytic enzyme: that the evidence is accumulating in favor of the Islands of Langerhans as the producers of this enzyme and that their invasion and destruction is the constant pathologic entity. The treatment is that which will best improve nutrition and not tax the carbohydrate consuming powers.

THE TREATMENT OF GRAVES' DISEASE.

BY ARTHUR W. ROGERS, M. D.,
WAUWATOSA, WIS.

This article is not written with the idea of presenting some new or startling therapeutic measure, but with the purpose of emphasizing those etiological factors which suggest the most rational course of treatment.

Until quite recently so many and varying theories have been advanced to explain the origin of Graves' disease that great confusion has resulted in its treatment, which has been mostly empirical. During the past few years, however, these different theories have been approximating and resolving themselves into two chief ones, viz.: the glandular and the neurotic, and at the present time the great majority of the profession claim that these patients are almost invariably neurotic. In fact, a close examination into their heredity, a careful survey of the symptom-complex and a knowledge of the pathological findings, must convince the most skeptical that the patient is suffering from a malady of pre-eminently neurotic origin and affecting chiefly the nervous centers. A well known teacher of therapeutics has remarked that the only correct method of studying the cure of disease is by mastering etiology and pathology. Following this dictum we must treat Graves' disease as a nervous phenomenon, as practically all the pathological findings are confined to nerve tissues, while its symptoms and course point to a "primary disturbance of the cerebral centers particularly those which control the nutrition of the thyroid gland and regulate the action of the circulation." We fully realize that no arbitrary line of treatment has as yet been established for this class of patients, but yet there is undoubtedly the most good to be derived for the majority in certain suggestions to follow, which are the result of observing the effect of treatment on thirteen cases of Graves' disease, some of a very pronounced type and all accompanied by three or more of the classical symptoms of the disease.

Of the thirteen cases all but one recovered, this one passing on to a fatal termination. In most of them one or more of the physical symptoms disappeared. The length of time since discharge varies from two to six years, thus affording ample time to form reliable conclusions as to what can be accomplished by treatment.

Trusting that we have thus far demonstrated the most probable origin of Graves' disease, we shall now endeavor to establish what

occurs to us as the most rational course of treatment, and first call your attention to a few cardinal points.

All these patients are reduced physically and call for constitutional measures. All cases will not improve under the same treatment. Some few yield only to surgical interference.

Several years ago Gowers remarked that the most important element in the treatment of exophthalmic goitre was "tranquility of mind and rest of body," and many writers since have laid stress upon this point, but we find a tendency to advise this mostly in very acute and pronounced cases. We desire to emphasize the advantage of rest and to further state that no case can be so slight but that rest and rest in bed should be considered the primary and most important thing. In no class of patients does the Weir Mitchell method prove as successful as here. I realize that the physician is often at a great disadvantage in advising this, since the patient rebels, especially if the case is mild and the symptoms in their incipiency. However, a strict "rest cure" should be advised, and, if possible, carried out faithfully with careful regard to details for at least six weeks. The diet should be carefully regulated, allowing the patient simple yet nourishing food from four to six times in each twenty-four hours, avoiding all articles of diet tending to produce gastric or intestinal fermentation and thus avoid further irritation to an already highly irritable heart. Many of these cases have an annoying and exhausting diarrhea and hence all the more need of careful attention to diet. In some instances the lax condition of the bowel yields only to a liquid diet and astringent medication such as Dovers' powder, bismuth subnitrate and beta-naphthol.

The muscular tone should be improved by daily salt sponge baths, Swedish movements, general massage and faradization. During the first two weeks it is best not to have the patient leave his bed, but after this, sitting up in bed from two to three hours daily and gradually increasing the time can be permitted. Later a warm bath and getting about gradually should be tried, always closely observing the effect of exercise on the cardiac movement and regulating it accordingly. Most of these patients are nervous and irritable and find decided relief in the exhibition of the bromides and other sedatives. We are in the habit of prescribing a solution containing two grains each of potassium, sodium and ammonium bromide, two minims of Fowler's solution and four minims of tincture of nux vomica to the drachm of camphor water, and giving half an ounce of this solution well diluted three to four times daily. Codeine in doses of one-fourth to one grain three to four times daily is more satisfactory where the bromides

cause gastric disturbance. Sulphonal in doses of three to five grains six to eight times in twenty-four hours has an excellent sedative and hypnotic effect. Anemia and mal-nutrition are best combatted by the usual tonic preparations of iron, quinine, arsenic, strychnine, hypophosphites, maltine and Russell's Emulsion. The various cardiac sedatives are all disappointing, and digitalis usually fails to produce any permanent effect. It is well, however, to try the effect of first the tincture of digitalis and then strophanthus. Gowers speaks very highly of the results from using the tincture of belladonna in increasing doses or the sulphate of atropine given hypodermically. The same authority speaks warmly of the internal use of ergot. These last two drugs surely influence very favorably at times the vascular disturbances. Along this line some writers have suggested the use of adrenalin hydrochlorate. Where rest and internal medication fail to allay the tumultuous action of the heart an ice bag over the precordium will often afford relief. Galvanism used frequently and perseveringly is more efficacious than most text-books suggest. It is best to give this treatment with the patient in a recumbent position and administer it two or three times daily. The procedure consists of applying the negative pole to the thyroid gland or over the sympathetic nerves, and the positive over the occiput or between the shoulders, and using a current of from three to eight milliamperes for three to five minutes. We have observed in some cases a lessening in the size of the goitre and a reduction of from twelve to fifteen beats of the heart after each treatment.

In those cases in which a rigid "rest cure" cannot be carried out, it is desirable to resort to a modified form, advising the patient to lead as quiet a life as possible and avoid all unnecessary fatigue of body and stress of mind. Certain hours should be set aside daily for rest in a recumbent position. Late rising and early retiring should be the rule. One should call in all physical and medicinal measures to produce the best state of bodily health. Much good can be accomplished by hydrotherapeutic measures. We have found much efficacy in using hot salt baths followed by various cool or cold sprays and douches. The same use of massage, electricity and drugs applies here as in the rest cure cases. Two things are absolutely contraindicated. One is the hypodermic injection of any substance into the thyroid gland, and the other the internal administration of any preparation of the thyroid gland.

In considering the treatment of Graves' disease from a symptomatic standpoint there are two classes of symptoms that engage our special attention, viz.: The nervous and cardio-vascular. These patients are

almost invariably nervous, irritable, capricious, hysterical, and poor sleepers. The various sedatives and hypnotics above mentioned will usually control these symptoms when rest, hydrotherapeutic and other mechanical measures fail. Most of these cases are quite suggestible and oftentimes much good is to be derived from mental therapeutics applied by both physician and nurse through the means of placebos and general and local baths, packs, cupping and rubbing with various liniments, etc. Of the cardio-vascular symptoms, tachycardia, irregular and tumultuous heart action are the most troublesome. Rest, the ice bag and the usual cardiac sedatives usually prove helpful. The distressing vaso-motor phenomena, such as alternating hot and cold flashes, goose flesh, general and local perspiring are helped by the use of hot hip and foot baths, cool sponging, ergot and belladonna internally, or sparteine-sulphate hypodermically. Sometimes the exophthalmus is so pronounced as to call for special precautions lest some infection of the conjunctival sac occur. This can be accomplished by the frequent application of some bland antiseptic collyrium. One author suggests frequent gentle pressure on the eyeballs to reduce their prominence.

Finally, from a surgical standpoint Graves' disease has not afforded many glowing records. I find none so bold as to recommend surgical interference as a routine practice but rather as a *dernier resort*. It is difficult to find any very reliable statistics as a result of surgical operations to relieve the symptoms of Graves' disease because of the confusion resulting from so many different operations and operators, as well as the widely different classes of patients operated upon. So far as our observation extends it seems as if every possible opportunity for treatment should be offered a patient before recommending surgical measures because of the danger attending these operations. While the knife has undoubtedly cured some of these cases yet it is to be remembered that no surgical procedure will cure all and that sudden death has not infrequently followed carefully planned and skillfully executed operations. Most surgeons object to a general anesthetic, which is natural when we realize that in these patients the heart is usually enlarged, its muscles degenerated, and the heart centers markedly irritable. A number of operations have been suggested and tried. The chief ones are: section of the cervical sympathetic on one or both sides —with a mortality varying from twelve to fifteen per cent.; ligating the thyroid arteries—with a mortality of twenty-eight to thirty-two per cent.; exothyropexy, which consists in exposing the thyroid gland and suturing it in the wound (this has been abandoned because of the

high mortality); thyroidectomy—with a death rate varying from fourteen to twenty per cent.

From the foregoing it is evident that no form of operation as yet affords a very hopeful prognosis. It would seem that a certain per cent. of patients suffering from Graves' disease cannot be helped by internal medication or other means, and if the disease is accompanied by pronounced symptoms, especially a prominent goitre, the chance of an operation should be taken. Having decided upon surgical interference, it is necessary next to decide which operation affords the most cheerful outlook for a favorable termination, and it would seem that partial extirpation of the enlarged thyroid gland or complete excision of the cervical sympathetic are the most promising. Either operation should be performed under local anesthesia.

MANIFESTATIONS OF RHEUMATISM IN INFANCY AND EARLY CHILDHOOD.*

BY ARTHUR TENNEY HOLBROOK, M. D.,
MILWAUKEE.

The term "rheumatism" as employed to-day is comparable to the term "diphtheria" as used before the discovery of the Klebs-Loeffler bacillus. In the absence of an exact definition, based on accepted etiologic factors, we find medical journals and societies the arenas of much dispute over various manifestations of disease that are said by some to be "rheumatic," "rheumatoid," or "rheumatism" of certain tissues or organs, and said by others to be anything from "idiopathic peritonitis" to "growing pains." Such confusion of terms will exist until the cause of rheumatism may be incorporated into its definition, and then these indefinite terms will die the hard, slow death that has been accorded the kindred expressions of "diphtheritic sore throat" and "diphtheroid."

This lack of a distinct understanding of what rheumatism really is; the frequency with which rheumatism in children is overlooked, because of peculiar symptomatology; the great importance of an accurate diagnosis when rheumatism is present in the young—are the factors that have stimulated this study and presentation of the subject.

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 5th, 1903.

There is practically an agreement on this statement: Rheumatism is caused by an accumulation in the blood of some poisonous matter which irritates specially the fibrous and serous tissues. The nature of the poison and its origin are the mooted points. Such theories as Mitchell's spinal cord lesion, or Constatt's vaso-motor disturbance, nowadays receive no support. Theories of the climatic, miasmatic, and weather origin; of the results of "unbalanced metabolism;" of "hereditary weakness"—all perhaps have their grains of truth, but they separately or collectively can stand on no ground but that of contributing factors.

There is a poison—what is it? The uric acid excess seemed for a time to offer an explanation, but reneated investigations and experiments, prominently those of Garrod and Bartels, refute the idea. Probably the most popular theory has been that there is an excess of lactic acid in the blood, a theory which was long saved from refutation because there is no reliable quantitative test for lactic acid in the blood. Richardson in his experiments injected lactic acid into the peritoneal cavities of cats and dogs, and, although no joint affections resulted, he produced endocarditis. His results, published many years ago, satisfied many of the supporters of the lactic acid idea until the germ theorists produced endocarditis by their injections and also the important addition of joint affections.

In 1899 Wasserman succeeded in isolating a streptococcus which produced in rabbits: multiple arthritis, endocarditis and death; and then reproduced the same coccus in the blood of the infected rabbit. Malkoff and Westphal later succeeded in repeating the experiment, and Menzer reports a similar streptococcus found in cultures from the tonsils of one hundred rheumatic patients which, when injected, caused joint affections in guinea pigs.

Singer, after a series of most elaborate bacteriologic experiments with the blood, perspiration, urine, and joint secretion, concluded that acute rheumatism is due to a process of infection resulting from the circulation in the blood of different kinds of pathogenic bacteria, with subsequent formation of peripheral metastases.

Heimann, who has carefully followed the bacteriologic experimentation, believes the cause is an attenuated variety of pyogenic bacteria, entering the system usually through the tonsils, digestive and respiratory tracts. The germs and toxins develop, then find their way to the serous cavities, and by predilection the joints, and set up an inflammatory process. The absence of purulency in the joint effusions he explains on the ground of attenuated virulency of the infecting microbes. Complicating endocarditis is caused, he believes, by the

direct affection of the endocardium by these germs and toxins, rheumatic chorea being similarly produced by affection of the cortical cells of the cerebrum.

Additional support is given the germ theory by certain clinic and pathologic findings. The symptomatology of an acute rheumatic fever is certainly analogous to that of other infectious diseases. The blood findings correspond to those of pneumonia, diphtheria, erysipelas, and other acute infectious diseases, showing a diminished hemoglobin, between 65 to 75 per cent., of normal; a marked diminution of red corpuscles; and a leucocytosis of 16,000 to 19,000 per cubic millimeter. Pathologically, the findings of hemorrhages in different organs, such as heart, liver, kidneys, suggest infection.

Of the predisposing causes, heredity is the most potent, especially in children. Holt's figures show hereditary influence in two-thirds of his cases; and Cheadle's carefully compiled statistics show nearly as large a percentage. Exposure to cold is almost invariably given in case histories as an immediate cause.

On the whole, therefore, it seems justifiable to place rheumatism in the category of infectious diseases, considering its symptoms to be the result of microbic activity (probably of a streptococcus) and toxin development and absorption; the disease development being influenced by certain conditions of heredity, climate, etc.

Pathologically, the synovial membranes of the joints during an attack are highly injected, and there is an effusion of fluid containing blood cells and sometimes leucocytes. Minute hemorrhages into the membranes or other tissues of the heart, liver, kidneys, etc., are not uncommon. The cartilages of the joints are swollen, but it is extremely rare for them to ulcerate or suppurate, and bacteriologically the fluid is practically sterile. Tendinous, fibrous nodules may be formed, as will be noted later.

With this understanding of the etiology and pathology, we take up the manifestations of rheumatism in the young, omitting muscular rheumatism, scarlatinal rheumatism, and the so-called rheumatoid affections.

Acute articular rheumatism is rare under three or even five years of age, and is extremely rare in infants under one year of age. But nineteen authentic cases under one year were collected and reported by the American Pediatric Society up to 1899, and but few authentic cases have been added since. Seibert collected thirten cases under one year; Henoch, Senator, Koplik all reported cases. Guthrie had one case, in a child eleven years old; and Jaccound had two cases shortly after birth, in each case the mother suffering acute rheumatism

at the time of delivery. In the Charing Cross Hospital records for eight years, there were four hundred and fiftv-two cases of rheumatism, which included but one young infant. Errors of diagnosis, and the fact that few rheumatic children are sent to hospitals prevent exact statistics; but the case records of our most reliable pediatricians show the rarity of the disease in these early years of life.

The type of rheumatic fever in children is so different from that in adults that Carmichel has said: "Those unaccustomed to children would hardly recognize an acute attack of rheumatism by taking the adult type as a guide." In fact, rheumatism in the young is overlooked with surprising frequency, and is confused with grippe, scurvy, neuritis, syphilis, tuberculosis, bruises, sprains and very often with so-called "growing pains." It is, however, more often overlooked than confused with other affections.

These facts must forcibly impress upon us the importance of knowing thoroughly the manifestations of this disease in children, when we realize that the vast majority of heart lesions are of rheumatic origin, and that an unrecognized rheumatism, time and time again, has unnecessarily crippled a heart.

In a well marked attack the temperature is rarely over 101.5°. The swelling of the joints as a rule is very moderate, the pain also is slight, and oftentimes there is nothing more than a stiffening of joints with very slight pain on motion. Usually but few joints are affected and frequently but one. In the order of frequency of affection, probably ankles stand first, then knees, small joints of the feet, wrists, elbows, hips. The skin is moist; but the excessive perspiration of the adult type is absent. The urine is highly colored, dense, and shows an excess of lithates.

Da Costa in commenting on the seeming mildness of these symptoms says that all too often the physician postpones his diagnosis until the dreaded complication of the damaged heart tells the story. And indeed so frequent is this complication as to give it almost the position of a symptom. Endocarditis and pericarditis are far more frequent complications of rheumatism in children than in adults. McPhedran has calculated that in cases between one and ten years of age, 83 per cent. suffer heart lesions; and between ten and twenty years, 69 per cent.; the percentage decreasing proportionately with increasing age. The seriousness of heart lesions bears no constant relation to the severity of articular trouble. In fact arthritic symptoms may be so slight as to be entirely overlooked, and the heart lesion one of gravity. Endocarditis is more frequent than pericarditis, while myocarditis, though occasionally reported, is rare. The heart affec-

tion usually appears following an attack, but may appear during active symptoms, sometimes appearing as an irregular, intermittent type, breaking out afresh as new joints are affected.

Endocarditis is usually ushered in by restlessness, hurried respiration, dry cough, uneasiness or even pain in the cardiac region, a rise in temperature, and the development of a murmur which is usually of mitral origin and heard near the apex during systole, being followed usually by an accentuated second sound or a reduplication of the second sound at the apex. Occasionally instead of the mitral an aortic murmur is present; and very rarely a diastolic aortic, or a diastolic or presystolic mitral. The heart's impulse is increased in force. Alteration in the size of the heart is practically impossible of detection. The pulse is tense and beats are of unequal force and length. Ulcerative endocarditis or cerebral embolus may be sequelæ of this condition. Besides the marked signs of endocarditis given, we often encounter a dulness of the first sound without distinct murmur, giving what Da Costa has called by the convenient term of a "murmurish" character.

Pericarditis presents the symptoms of endocarditis with greater local distress and pain and higher temperature. It is diagnosticated by the classic signs of friction rub, followed by increased area of dulness from effusion, displacement of the apex upward, muffling of apex sound. Plastic pericarditis may follow.

Another complication, or accompaniment of rheumatism which is so constant as to make it useful diagnostically, is tonsillitis, which may precede, accompany or follow the joint manifestations. Tonsillitis often ushers in an attack of endocarditis resulting from rheumatism, and is often associated with marked irritability and emotional disturbances.

Pleurisy also frequently develops during or following an acute rheumatism in children.

Torticollis may be present for a day or two during an attack but does not persist.

Chorea, which we have learned to consider as the result of rheumatic intoxication, oftentimes is the first manifestation of an acute attack of rheumatism in children, and may develop at any time during or after the attack.

After a severe articular attack or after repeated attacks, there not uncommonly develop in children subcutaneous, fibrous nodules, which are almost never seen in adults. They are oval, semi-translucent bodies, like sago grains, varying in size from a pin's head to a hazel nut, and are found mainly about the joints, but also may be found

about tendons. They are often painless, but may be slightly tender to pressure. They usually are absorbed and disappear within a few weeks, but may persist for months, and almost always are associated with endo- or pericarditis.

An accompanying erythema is frequently seen in children; and in severe cases a purpuric condition is occasionally seen, with numerous subcutaneous hemorrhages.

Anemia is a constant result of rheumatism in the young, and is particularly marked where the heart has been affected.

In making a diagnosis of rheumatism in infants and children, we must consider the following points:

(1) Heredity. At least two-thirds of the cases show this influence.

(2) History of previous attacks. In children attacks are usually repeated. Careful questioning should be made about previous joint swellings; tenderness and stiffness; "growing pains"; tonsillitis; torticollis; heart symptoms; erythema.

(3) The clinic picture, we have described.

(4) The exclusion of the following:

Multiple neuritis, tuberculosis, syphilitic bone disease—each of which may be readily distinguished by careful attention to family and clinic history and to anatomic location of the affection.

"Growing pains," so-called, an important consideration as is shown by Brockbank, who collected five cases of well marked rheumatism with the dreaded heart sequelæ, which had been diagnosticated as "growing pains." If there be such an affection as "growing pains," it must be located in the epiphyseal lines, and certainly cannot be confused with the clinic symptoms of a rheumatic attack, if careful examination be made.

Finally must be considered scurvy, which presents the most difficult differentiation and that in very young children.

Holt says: "In an infant, when symptoms are confined to legs and are not accompanied by fever, they are almost certain to be due to scurvy even though the gums are normal and the ecchymoses have not yet appeared." When the gingivitis, swellings and ulcerations about the teeth, and discoloration of the mucous membranes appear, the diagnosis of scurvy is unquestioned, especially when coupled with this is a history of bad feeding and of continued use of proprietary foods. A final proof of the correctness of diagnosis is in an immediate improvement under antiscorbutic diet, with no other treatment.

It is well in considering a diagnosis of acute rheumatism in the

young to establish the following points which A. B. Marfan insists are determining:

(1) Mobility of joint. (2) Proneness to migrate from joint to joint. (3) Absence of all tendency to suppuration. (4) Frequency of inflammation in heart and various serous surfaces. (5) Favorable action of salicylates.

Acute rheumatism *per se* is seldom, if ever, dangerous to life in children. In the great majority of cases the articular symptoms would disappear without special treatment.

The danger lies in the cardiac complications. Since one attack of rheumatism is almost certain to be followed by another, and since where the heart is once affected the lesions usually increase with each recurrence, rheumatism in children, once firmly established, is a grave affection.

A succession of subacute attacks without marked joint lesions, is the most dangerous form for the heart.

The duration of the rheumatic attacks reported in young infants averages from eight, fourteen to twenty-one days.

Where the heart is affected, acute symptoms, chiefly cardiac, persist for five or six weeks.

A murmur developed during an acute attack, indicative of mere roughening, may entirely disappear in the course of a few months, provided no fresh attacks of rheumatism intervene. Dilatation of the heart often follows any of the rheumatic heart lesions. Chorea is rarely a serious complication. Persistent anemia, following rheumatism, especially where the heart has been involved, is very stubborn and oftentimes serious.

Although cases are reported of permanent crippling, in children the joint affections almost invariably clear up with no permanent thickening or ankylosis.

The primary purpose of this paper does not comprehend the treatment of rheumatism in children; but inasmuch as the manifestations are greatly modified and importantly influenced by well-directed treatment, it is proper to add this consideration.

During an attack the greatest care must be used to keep the little patient absolutely at rest, and to prevent chilling. The child should be kept very quiet in bed, in flannel nightdress, and between blankets.

The effect of diet on rheumatism must necessarily be imperfectly understood until the etiology of the affection is completely determined. It is established, however, that rheumatic children do best upon a diet from which the starches and sugars are excluded.

Milk is the ideal food; later in the attack broths and fish may be added. Water drinking should be encouraged.

The first question under drugs naturally concerns the effect of the salicylates. On the point of their usefulness there is practically an agreement among pediatricians: as to their physiologic effect there is wide variance of opinion. They are to be preferred to salol, salipyrin and the many substitutes and combinations flooding the drug market, because of reliability of preparation and certainty of result from fixed, well-established dosage. The salicylate of sodium is perhaps the most widely used and reliable and may be given safely, in divided doses, up to thirty or forty grains (2 to 2.5 grams), in twenty-four hours, to a child of five years; and up to twice that amount in a child of ten. It may be given conveniently in syrup. After three or four days the dose is gradually diminished. If the child does not respond to the use of salicylates after three days, they should be discontinued. If heart complications are developed, they should also be stopped.

Their chief use is to relieve the pain, and, all things considered, it seems wisest to reserve them for that use alone.

Heimann suggests the use of salicylate of sodium as a prophylactic, in doses of three to five grains (.2 to .3½ grams) three times daily, for one week of each month, for the period of one year following an attack, much as quinine is used in malarial subjects. This course has, however, been generally criticised as based on false therapeutics, the generally accepted theory being that the salicylates have no specific anti-rheumatic effect, but that they simply relieve pain; and, inasmuch as they are somewhat depressing tc the heart, and may split up into carbolic acid in the system and irritate the kidneys, the continued use of the salicylates is dangerous. The rational course is to use the salicylates for the relief of pain; and when they are contraindicated, and when they have served their purpose, to substitute for them alkalis with plenty of water, such as sodium bicarbonate, fifteen to twenty grains (1 to 1.5 grams) in simple syrup every three or four hours, or divided doses of potassium acetate up to two drachms (8. grams) daily.

Quinine is the safest drug to add for temperature reduction, and may be given up to six grains (.4 gram) daily in a child of five years.

If necessary, opium, bromides and chloral may be given for rest. Goodhart recommends potassium bromide, five grains (.35 grams), and chloral, one or two grains (.07 or .15 grams) for a child of five or over.

The joint symptoms in children, as a rule, do not call for local

applications. If called for, relief may be gained by wrapping the joints in cotton wool, outside of which oiled silk, protective or dental rubber may be bound. Flannel bandages saturated with a solution of potassium nitrate are also useful. For persisting swelling of joints the following ointment is recommended: ten to twenty grains (.65 to 1.30 grams) of iodine, and one half ounce (16. grams) of belladonna ointment, in one ounce (32. grams) of lanolin. The much advertised pastes and muds, with their startling variety of names of anti-something, have failed utterly to even approach their claims in a fair number of trials made in institution work.

The use of antistreptococcic serum in rheumatism, based on the streptococcic theory of infection, has been made by Menzer, Chipman, and others, and although the procedure is interesting it must as yet be regarded in a purely experimental stage.

As to prophylaxis: clothing, climate and diet are influential, as is well understood. Jacobi recommends the removal of large tonsils and adenoids, and the careful cleansing and douching of lesser nose and throat affections, in the belief that much infection gains entrance through these avenues.

Walsh urges the cleansing of the digestive tract to prevent absorption; and Charcot believes that rheumatic infection not only enters at these points but also through wounds, contusions, bruises, fractures, etc.

For the anemia following rheumatism, in addition to iron preparations, cold douching of the spine and cool baths are highly recommended, but must be used with caution and consideration of heart conditions.

Where heart trouble is suspected or established hot emollient poultices or sinapism should be applied to the precordia. Some pediatricians prefer the ice bag, but as a rule, children stand extreme heat better than extreme cold.

The usefulness of drugs and measures for the relief of the distressing symptoms of rheumatism is unquestioned; but the most important part of the treatment in children is that which is directed toward maintaining the activity of the various organs of the body, *with the greatest possible economy of the heart's action.*

Fisher says it is very easy to mistake physical weakness for laziness in children, and where this error is made in a child whose heart has been embarrassed by rheumatic affection, a grave injury always results. The only safe rule is this: In any case of illness in a child, where rheumatism has not been positively excluded from the diagnosis, the child should be kept absolutely at rest in bed; carefully

protected against any chance of being chilled; given a diet restricted in sugar and starches: encouraged to drink freely of water to which an alkali may be added if thought best; and the heart carefully watched.

No harm could ever result from such simple precautions, while, from the wide adoption of such measures, many hearts would be spared serious affection, and the places of many invalids would be taken by strong men and women.

REFERENCES.

Ausset: L'Echo Med. du Nord., vol. V.
Brockbank, E. M.: Brit. Med. Jour., 1900.
Carmichel, J.: Scot. Med. and Surg. Jour., 1898.
Charing Cross Hosp. Report., 1900.
Chipman: Med. Record, Feb., 1902.
Cotton, A. C.: Medical Age, 1898.
Da Costa, J. M.: Am. Text Book. Dis. of Child.
Ewing, M.: Arch. Pediat., July, 1899.
Fisher, T.: Brit. Med. Chirurg. Jour., vol. XVIII.
Gow: Canada Lancet, vol. XXXIII.
Heimann, H.: Arch. Pediat., 1901.
Holt, E.: Dis. of Children.
Johannessen, A.: Arch Pediat., 1900.
Josias: La Med. Moderne, 1901.
Lannelongue: Gazette des Malad. Infantiles.
McKim, S. H.: Arch. Pediat., July, 1899.
Menzer: Jour. Am. Med. Assoc., Aug., 1902.
Simpson, C. F.: Am. Pract. and News, vol. XXIX.
Stengel: Phila. Pediat. Soc. Rep., 1902.
Steven: Brit. Med. Jour., 1899.
Weil and Galavardin: Rev. des Malad. de l'Enfants.

Discussion.

DR. BOORSE, Milwaukee—The subject has been so thoroughly covered that I feel that I can add very little to what has been said. I desire, however, to emphasize a few points that have been mentioned in the paper, and first in regard to hereditary predisposition. While there has been a great deal of theorizing and speculation regarding the etiology of rheumatism, we cannot ignore the clinical observation that heredity as generally understood is an important factor in the causation of this disease.

Another point that I desire to call attention to is the apparent difficulty in recognizing the manifestations of rheumatism as it occurs in early life. This difficulty, it seems to me, arises from the fact that we approach the diagnosis of diseases of early life from the standpoint of the manifestations of diseases in adults and when we do that, when we take a clinical picture of rheumatism as it occurs in adults, and the same is true in many other diseases, we fail to recognize the disease as it occurs in infancy and childhood.

The great danger of serious involvment of the heart in rheumatism, in early life, renders an early diagnosis of this disease imperative. Jacobi, the Nestor of American pediatrics, has truly said, "if every case of incipient rheumatism were sent to bed, if no child with growing pains were allowed on the playground or at school, many a life long ailment and early death would be avoided."

Endocarditis, as has been stated, is a frequent complication of this disease. It is also occasionally met with in other acute diseases, and it should be the rule of a physician to carefully examine the heart in all acute diseases, particularly in tonsillitis, scarlatina and in conditions where the manifestations point to rheumatism.

One point in regard to the treatment of the disease with salicylates: it was stated in the paper that the physiological effects of the salicylates were not known, and that they should be given for their anodyne effect. I believe that we can expect more, and that they have in a certain way a specific effect, probably in inhibiting the development of the germs, or in neutralizing the toxins of the germs.

In the treatment of endocarditis complicating rheumatism, the most important point is rest. The child should be kept quiet in bed until compensation is fully established, which, as a rule, means for a period of from six to eight weeks.

DR. A. W. GRAY, Milwaukee—The fact that cardiac complications in rheumatism are insidious in onset, should be taken to heart. The clinical symptoms are usually plainly and unmistakably present, but are overlooked during the early stages until unnecessary damage is done. Diagnosis is the thing, and diagnosis is seldom made without examination. Not long ago I had an opportunity in a case in which the temperature did not run above 100, in which joint complications were so slight as to have been almost overlooked, to watch the development of a cardiac complication with a mitral systolic murmur, at a time when it seemed that convalescence was established. The case might easily have been misunderstood. It was a lesson for me that the word insidiousness is frequently a synonym for carelessness.

DR. MISHOFF, Milwaukee—I would like to take exception as to the cause of this disease when it is stated that it is due to heredity. We do not know the etiology of the disease, and yet we do know that we apparently inherit it. But I think that there are two causes for the disease, one of which, if you choose to call it so, is predisposition. The children of educated people, if they choose, may become intelligent and educated people; the children of these people might inherit, not the education, but the predisposition to become educated. Children of diseased parents inherit the predisposition to take the disease.

Another reason why there are children who have rheumatism in the family of rheumatics, is found in the condition in which the parents live and the surroundings under which they bring up their children. That is their heredity. They inherit parents who do not know how to give them healthy surroundings

DR. H. B. SEARS, Beaver Dam—So long as the etiology is admitted to be unsettled and so long as the pathologists or bacteriologists cannot agree on a specific germ as the cause of rheumatism, we are certainly warranted in

turning our attention most diligently to other factors which may have quite as important a bearing upon the production of disease as do germs, and, possibly more. My own impressions emphasize to me the very great importance of mal-nutrition. By this I mean imperfect digestion of food with its resultant auto-intoxication, together with defective elimination, resulting in accumulation of waste products in the system, to such a degree that cell function is modified, and possibly even structural changes may occur. One thing seems quite sure, and that is that the accumulation of toxic products either produces the rheumatism, or, by its lowering the resistance of the tissues, makes it easy for germs gaining entrance to the system to not only exist, but also to multiply and produce their characteristic changes. The doctor's conclusions in regard to the influence of sugars and starches in the production of rheumatism do not harmonize with my own experience. I can agree that indigestion is the prime cause and that sugars and starches may be illy borne by certain cases, and thus aggravate the condition; however, *not* sugars and starches, but rather meat is the food, more than any other, that, owing to its indigestion and the decomposition of the residue, is the one great cause in children of the existence of rheumatism.

DR. S. S. HALL, Ripon—Prof. Buckingham used to tell us, when I was a student way back in the 60's, never be afraid to say, "I don't know;" and I have formulated for my own action in addition to that, that if you are certain that there is not some other fellow who does know and can back up his assertion by proof, don't be ignorant; but don't be afraid to say you don't know if you cannot know.

We don't know much more now about the etiology of rheumatism than they did when the Greeks used to put it under the same nomenclature that they did catarrh; the root of the word meaning a flux, being the same in both cases, and the prefix "kata" added to the root being the origin of our word catarrh.

But long observation has established a few facts that assist us, I think, in the treatment of the disease. We certainly do better than we did when it was a common saying that the best treatment for rheumatism was six weeks and plenty of flannel; or rheumatism well treated lasted 7 weeks, and without treatment 49 days.

In the old Massachusetts General Hospital, again way back in the 60's, I remember seeing rows of patients of whose disease the students could make a diagnosis as the result of the observation that the patients had flannel blankets on the bed, under them and over them, and a flannel blanket around their shoulders to keep around them when they sat up. I think that is good treatment still. We could also tell what was the matter with the patient by finding that he was taking syrup of lime—an alkali. From that time to this, the alkaline treatment is one of the most important, and I think it is regarded by the large majority of physicians as the most important treatment of rheumatism; but there is something that has resulted from salicylic acid that has brought us down from the 49 days or 7 weeks' period of rheumatism. They used to tell us that our patients would not get well any sooner if we gave them opium, but they would get well much more comfortably. I still believe that—if it is necessary. I personally, although I have used salicylic acid ever since it was born, have never observed in the ordinary treatment of rheumatism that it had any

depressing effect on the heart. If it did I could not tell whether the depressing effect was from the rheumatism or from the heart affection or the debility of the patient as the result of the condition.

DR. CHARLES S. SHELDON—One point in regard to treatment: I have found that one of the derivatives of salicylic acid called aspirin, is a remedy which in my hands has proved far superior to the salicylate of soda. It is equally effective so far as relieving pain is concerned, and is much better borne by the stomach. It is only soluble in an alkaline solution and passes through the stomach unchanged.

DR. G. J. KAUMHEIMER, Milwaukee—There is one rheumatic equivalent in children which has not been referred to, and that is rheumatic edema. I can recall two cases where I was called to see children with great edema of the abdominal wall, which, in one case, in 24 hours and in the other in 36 hours, disappeared and was replaced by joint symptoms.

A great deal of my practice is among children, and I see a case of rheumatic hemorrhage into the skin about once a year.

In regard to salicylates, I believe a great deal of the lack of effect is from not giving enough. My experience has been that children will stand very large doses of them, and my general rule, if the case is urgent and I desire a prompt effect, is to give at least a grain for each year of the age, every two or three hours. Dr. McWilliams said, when I was a student, you cannot get any effect from 5 to 10 grains every 3 or 4 hours. The sooner you get the ears buzzing and get the patient deaf, the sooner you get results. I believe you get more than just a direct anodyne effect, but at the same time salicylates, after the pains have been relieved, will not relieve the aching or the edema, and you will have to use alkalies, iodide of potassium, iron and cod liver oil.

DR. ARTHUR T. HOLBROOK, (Closing)—In reference to the diet, I think that perhaps too much importance has been attached to the effect of diet in cases of rheumatism in children; and I gather this not so much from my own experience as from reading the various opinions as expressed by pediatrists. It may be true that patients who do very well with starches and sugars eliminated, would do as well with meats eliminated; at least there is a difference of opinion in the matter. My own experience has been in favor of the starch and sugar elimination.

I have merely this end word to say: With a better understanding of the cause of rheumatism, there will be less truth in the old saw that, there are two methods of treatment of rheumatism, one to grin and bear it, and the other to bear it without grinning.

A CASE OF DWARF PELVIS WITH CESAREAN SECTION.*

BY J. C. CUTLER, M. D.,
OF VERONA, WIS.

History:—On December 19, 1902, I was called to see R. M., single, dwarf, pregnant, aged 24, weight 96 pounds. She was born in Dane County, had an extremely large head and did not walk till four or five years of age. The attending physician remarked disparagingly of her to the mother, who had given issue to three others who died at birth. The father died of delirium tremens, the mother of cancer, the mother's father died in the poorhouse. A half sister is not bright, and a cousin is an idiot. She menstruated at 14 and has been regular. Her last period was early in May, 1902, she does not remember the exact date. Confinement was expected early in February, 1903.

Examination:—The patient has large box-shaped head, deformed teeth, a palate with horseshoe arch, full chest, well developed breasts, short loins, with lower ribs infringing upon crests of ilia, pendulous abdomen; position L. O. A., head apparently normal size (7 months) and resting upon the symphysis. There was a slight lumbar lordosis. External genitals normal. Internally—caliber of vulva large, cervix scarcely palpable, promontory low and very prominent, protruding into the pelvic space nearly to line of transverse diameter. Pubic arch low and narrow. A sweep of examining finger gave the impression of a symmetrical inlet except the protruding promontory.

Measurements:—The measurements upon which a diagnosis was based are as follows:

Crests	23 cm.,	Circumference	75 cm.,
Spines	19 cm.,	Bi-ischiatic	8 cm.,
Trochanters	28 cm.,	Conjugata diagonalis	7.5 cm.,
Baudelocque	16 cm.,	Conjugata vera	5.75 cm.,

(Estimated by subtracting 1.75 centimeters from the diagonal conjugate.)

Diagnosis: Dwarf pelvis, simulating the flat, generally contracted, rachitic pelvis; first, in its marked diminution of antero-posterior diameter, and second, in the sacrum being pressed downward and forward between the iliac bones.

Indications: (Lusk, page 438) "As even the improved Cesarean section is a hazardous operation its performance is chiefly justifiable in cases where craniotomy and the delivery of the child by the natural passages involve the life of the mother in still greater peril. It is indicated, therefore, in extreme degrees of pelvic contraction, in the case of solid tumors in pelvic space, and advanced carcinomatous degeneration of cervix.

"Cesarean section is permissible if mother is moribund and child known to be alive, where rapid delivery by the natural passages is impossible. It may be done at mother's request. If left to the decision

*Read at the 57th Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, June 5th, 1903.

of the physician he should regard the welfare of the mother as of paramount importance."

It has been said that if a mother knows she cannot bear living children and yet persists in exposing herself to the repetition of pregnancy, the physician should perform Cesarean section in behalf of the child.

In the American Text-Book of Obstetrics, pages 917-18, we read that Cesarean section may be performed in the interest of the mother or of the child when safe delivery by version or by forceps is impossible. "But," it goes on, "the cases of real difficulty are those in which the delivery of a living child is impossible in any other way than by Cesarean section, yet the mother might be delivered with comparative safety by performing craniotomy." Then it asks: "Is it permissible to destroy the child in order to save the mother?" "Has she the right to refuse Cesarean section and to demand craniotomy in her own interest?" "Has the obstetrician a right to weigh one life against another and decide to take one by craniotomy or to jeopardize the other by Cesarean section?" We all feel that these are serious questions which we should not be called upon to decide alone.

The physician is neither pitcher, catcher, nor umpire, he simply strikes at what comes his way. He may refuse to strike at all and take first base.

Again, (Am. Text-Book) "The indication is absolute when it is impossible to extract the fetus, either living, dead or mutilated, through the natural passage. The modern symphyseotomy has narrowed the limits of Cesarean section somewhat, so that the indication is not now considered absolute unless the conjugate is 6 centimeters or less."

Under ordinary circumstances the indications in our case seemed absolute, but circumstances alter cases and in this case forced the consideration, at least, of other measures. The fact that our patient is a dwarf, mentally and physically, her offspring an illegitimate, she an orphan, her family history showing a tendency toward degeneracy, the physician acting in the capacity of a public servant, dealing with a public charge—these conditions added to the perplexity of an already difficult problem.

Her guardians, the County Poor Commissioners, were called in and the case presented in an unbiased manner. The induction of premature labor was suggested, but her case, one of supposed adultery, was in the courts, attempting to convict the guilty brute of this dastardly crime, so it was deemed inadvisable to interfere with "mother nature." It was doubtful, too, if the head could have been coaxed or compelled to engage even at this early date. For the same reason

version and extraction of the after-coming head was out of the question.

In considering symphyseotomy according to the Am. Text-book of Obstet., pp. 911-12, we read: "In general, symphyseotomy is applicable in obstructed labor in which the delivery of a living child may be rendered possible by a moderate expansion of the pelvis. The bi-parietal diameter of the average fetal head is 9.5 centimeters (3¾ inches). It is reduced by compression during birth to about 9 centimeters (3½ inches). After full separation of the symphysis the parietal bos projects into the interpubic space, and this in effect shortens the bi-parietal diameter to the extent of nearly a centimeter more, a conjugate of 8 centimeters (3 1/5 inches) will therefore be required for the passage of the head. Since a pubic separation of 6 centimeters (2 2/5 inches) affords a gain of 1.2 centimeters (¾ inch) in the antero-posterior diameter, delivery under symphyseotomy may be done in simple flat pelves with a conjugate not below 6.8 centimeters (2⅝ inches.)"

This precludes symphyseotomy in our case and the choice rested between craniotomy and Cesarean section. And now in view of the personal and family history I wish to provoke a discussion, for self enlightenment, upon the relative merits of the two operations, in similar cases. To this end I take pleasure in extensively quoting Joseph B. De Lee, my Professor of Obstetrics, (Chicago). In a paper entitled "Three cases of Cesarean section and a consideration of the Indications for Craniotomy," he says: "Craniotomy and its allied operations may be considered in many lights—their religious, moral, sentimental, humanitarian, sociologic, legal, and scientific."

In speaking of the religious aspect he says that the Catholics will not violate the Sixth Commandment; that the mother and child should have an equal chance; that the mother should be willing to "give a life for a life." "All religions except the Catholic," says he, "permit the operation of embryotomy in appropriate cases. The Jews, to whom the commandments were given, permit the violation of the sixth on the ground that the "tree should be spared, as it can bring forth more fruit in the future." The Episcopalians take a similar view. The Methodists recognize the importance of preserving the mother's life in the face of danger to both.

"Morally have we the right to take life even if it is to save another? The community forbids suicide, yet quite recently a man allowed himself to be scalded to death to save his fellow workman—'Go first', he said, 'you have a family.' The world applauds this action and accords that ignorant negro a place beside the heroes of its history. Those few words clear up this side of the question under consideration. We may allow the mother's interest to be first. She is a member of society, of more importance than an unborn child.

"I believe that there is a moral right in the sacrifice of one individual for another, for a family, for a community. This moral right has been recognized since Cicero who enunciated it clearly.

De Lee says the decision is often made on sentimental grounds, the maternal instinct being so strong as to become a craze. Here the feelings of the husband and father should be considered. "On this point," he continues, "I have the opinions of many men, rich and poor, educated and ignorant, professional and laymen, Protestant, Catholic, and Jew. The replies are all identical—'save both if you can but preserve the wife.'"

If society condemns craniotomy, must it also condemn abortion for uncontrollable vomiting of pregnancy? In comparing the two operations must we not also consider the value of the two lives in question? What if 35 per cent. of all children born die before reaching 30? What if one should do a Cesarean section and land a monstrosity, or an idiot and lose the mother besides? When the patient is exhausted by prolonged labor or presumably infected by repeated examinations or attempted forceps deliveries, should not craniotomy be done instead of Cesarean section, and in future pregnancies resort to the induction of premature labor or do the Cesarean operation under ideal conditions? These days of advanced surgery, the trained nurse, the Lying-in Hospital, and the better understanding of asepsis and antisepsis among the laity before, during, and after the confinement period, ought to decrease the absolutely necessary mutilating procedures.

And now to the point. De Lee asks:—"What would you do if the child were an illegitimate?" and, "What would you do if the mother were a dwarf, mentally and physically?"

In some of our larger cities they condemn a craniotomy to save an illegitimate, and in Wisconsin too, if attempted by a country doctor.

After discussing these knotty problems with the County Fathers, the public guardians of this unfortunate girl, they were unanimous in choosing for me that operation, which to their minds would most certainly promise both lives, viz., Cesarean section.

Operation: The patient expected to be confined early in February, 1903. In any event I decided to operate not later than February 1st. On January 16th I was called to see her for severe pain in the back, but found her in actual labor, having decided uterine contractions every 15 minutes. As soon as possible I started with her for the Madison General Hospital, where, assisted by Drs. C. S. and W. H. Sheldon and F. F. Bowman of Madison, the Cesarean operation was performed in the presence of L. P. Edwin and several nurses.

Patient had 8 hard pains while on the way. She stood the ten mile drive very well and went upon the operating table in good spirits at 8:50 P. M. The preparation being the first, last and only one, was thorough. The uterus was turned out of the abdomen and firmly held and protected with hot towels. The intestines were held back by hot compresses. I began the uterine incision low down and extended it upward in the median line between my two fingers. The child was removed by the feet and given into the care of our worthy secretary who was giving the anesthetic; the secundines were then scooped out, and the cavity flushed with hot bichloride sol. 1 to 5,000. Hemorrhage was readily controlled by vigorous massage, though we had a heavy rubber tube about the lower segment as a safeguard.

Dr. W. H. Sheldon closed the uterus with two rows of catgut, No. 4 for the deep thro' and thro' sutures, and No. 2 for the peritoneal. A pint of normal salt solution was left in the abdominal cavity, and it was closed in a unique manner by Dr. Bowman.

Patient was on table a little over an hour and a half. She talked to the physician before being taken to her room. A normal male child soon came to himself and made the best of his new surroundings.

After treatment: The patient was placed in bed and surrounded with hot water bottles, given hypodermics of ergotin, soapsud enemas and turpentine stupes to control tympanites; calomel, and salines as needed. Time and space will not permit my going into minute details. I removed the stitches in the abdominal wall on the 14th day and took mother and child back to Verona by train on the 18th day.

Prognosis: A favorable prognosis could reasonably be expected in this case since the conditions were prime. She was at full term, yet not exhausted by prolonged labor; the excretory organs were all active, she had not been examined internally for 10 days previous to operation, and her mentality was at least no hinderance, in fact she did not ask the nature of the operation and we did not tell her, except that we must help her.

Subsequent pregnancies: While some women have had two or more Cesarean operations, the majority—according to Jaggard—do not conceive after the first operation.

Ventral fixation is the rule after this operation, which sometimes interferes with future pregnancies. This woman being unmarried we did not resort to sterilization, though I believe we would have been justified in so doing.

It is hard to say what course I should have pursued in this case had it been left entirely to me to decide, especially had I obtained the history of family degeneracy before instead of after the operation. What would you have done?

For the brilliant results in this rare and grave operation I am indebted to the skillful assistance of my Madison colleagues, for which I thank them.

ACROMEGALIA.*

BY A. F. HEISING, M. D.,
MENOMONIE, WIS.

No doubt many of you have witnessed the so-called "freaks" in sideshows—individuals with immense hands and feet. Had you scanned the object of curiosity more minutely, you would probably have noticed a corresponding enlargement of the inferior maxilla. These doubtless were cases of acromegaly. Prior to the remarkable description by Marie of this awful disease little was known. Stanberg recognized in the portrait of a giant of 1553 a typical example of acromegaly. In 1839 Magendie described the same disease. In 1869 Varga first mentions changes in the hypophysis, and Langer also makes reference to the same condition. It was, however, Marie who some twenty years ago published a more minute study of this disease, describing the changes of bone, deepening of the vascular channels, dilatation of blood-vessels, hypertrophy of muscles and connective tissue. Stanberg, Langer and Klebs demonstrated that the changes in one part of the osseous structures cause—according to physiological law—alteration in other bones. The periosteum and the medullary canals stimulate, as it were, activity in the internal viscera causing an enlargement of the spleen, heart, in fact a regular splanchnomegalia. The most important change is found in the hypophysis, which assumes at times adenomatous and sarcomatous characteristics. The inferior maxilla often becomes so large that the teeth loosen and drop out of their alveolar sockets; at the same time, the feet and hands enlarge. The symptoms come on gradually, but are more marked in women than in men. In women menstruation ceases, and the patients believe they are approaching the climacteric; deep lancinating pains in the extremities resembling those of neuralgia and locomotor ataxia are present; disturbance of vision is an early symptom. The face enlarges early, and the extremities appear swollen, though this is not edema, but a genuine enlargement. The authors distinguish two types, *type en large* or *type en long*. In many cases the thyroid enlarges, simulating Basedow's disease, and diabetes insipidus and mellitus have been repeatedly observed. Stanberg finds that one-half the recorded cases develop between twenty and thirty years of age, though they have been known to occur at an earlier age. Both sexes are afflicted, but after forty, women predominate. The duration of the disease varies, and may be divided into

*Read before the Dunn County Medical Society, Menomonie, March 15, 1904.

three classes: first, a benign form, lasting from one to two years; second, a chronic form, lasting eight to ten years; third, a malignant, three to four, and terminating fatally. In the latter malignant sarcoma of the hypophysis is found.

The case I have to present to you to-day, is that of a woman thirty-eight years of age. Her mother died of tuberculosis, her father of some disease unknown to me. She claims that fifteen years ago she caught cold, and suffered a severe psychical trauma. At the same time, her menses ceased. She had diffuse pains over the entire body. Some ten years ago she had very severe headaches, after which her hair fell out, but after a short time hypertrichiasis developed over the entire body. Since one year ago she has acquired a vox mascula. Sight is impaired, and there is present rotary nystagmus. Fingers are stiffened, upper limbs also. In spite of increase in size, strength is diminished. This is quite a characteristic symptom of acromegaly. Upon inspection we find hands and feet proportionately larger than legs and arms. The skin looks, as the French term it, as if seen through a lens. The increase of bone is principally in breadth, muscles are flabby, skull is enlarged in breadth and length. The latter condition is rare. Protuberances are not marked. Ears are asymmetrical, left is larger than right. Lips are enlarged, lower more prominent. Nose is enlarged, especially the alæ. Face in toto is large. Eyelids are thickened, rotary nystagmus is present. Field of vision is impaired: there is lateral temporal hemianopsia. Fundus reveals atrophied optic nerve. Larynx is normal, but vocal chords are thickened. Roughened vesicular breathing present over both lungs. Slight cyanosis. Teeth are separated, and macroglossia exists. Uvula and palate are normal. Angle of jaw is obtuse. Costal space is narrow. Thorax is flat, sternum broad and thickened. Thyroid gland is small. Thymus is slightly present. Sacrum and spine are sensitive. Percussion is normal, but there is marked dulness over sternum. Apex of heart is in fifth intercostal space. Spleen is enlarged and six finger breadths below ribs. Right kidney is palpable. Testing of reflexes causes a series of contractions and muscular twitchings. Anemic murmurs are present over all valves. The patient has polydypsia, and polyphagia. Uterus is about four inches in length. According to Erb sternal dulness is due to enlarged thymus, but is more probably due to thickened sternum.

All medication seems of no avail. The patient is getting progressively worse. Iodide of potash has been conscientiously used, likewise thyroid extract. It clearly shows that we have to treat the disease symptomatically. Though we have no real remedy for this dread disease, it is a satisfaction to be able to recognize and understand that it is a hyperplasia of the nerves, muscles, and integument. It bears a close analogy to tumor cerebri, cretinism, arthritis deformans, ostitis deformans, leonteosis ossia, myxedema, diffuse hyperostosis, pachydermia, Basedow's disease, and locomotor ataxia.

WISCONSIN MEDICAL JOURNAL.

OFFICIAL ORGAN OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A Monthly Journal, published by the Wisconsin Medical Journal Publishing Co., and owned by and devoted to the interests of the Medical Profession of this State.

Original articles, Clinical notes, Correspondence, and Communications of interest to the Medical Profession are solicited. Reprints of articles contributed to this Journal will be furnished at cost price, but a number of copies of the Journal will be furnished contributors gratis. All manuscripts should be typewritten.

ARTHUR J. PATEK, A. B., M. D., Editor,
141 Wisconsin Street, Milwaukee.

Associate Editors.

CHAS. S. SHELDON, M. D., Madison.
HOYT E. DEARHOLT, M. D., Milwaukee.
OTTO H. FOERSTER, M. D., Milwaukee.
ALBERT W. MYERS, M. D., Milwaukee.

Collaborators:

Horace M. Brown, M. D.,	Milwaukee	U. O. B. Wingate, M. D.,	Milwaukee
Arthur J. Burgess, M. D.,	"	Chas. Zimmerman, M. D.,	"
Richard Dewey, M. D.,	"	Frank H. Edsall, M. D.,	Madison, Wis.
Louis Frank, M. D.,	"	W. E. Fairfield, M. D.,	Green Bay, "
Walter Kempster, M. D.,	"	Wm. E. Ground, M. D.,	W. Superior, "
William Mackie, M. D.,	"	Julius Noer, M. D.,	Stoughton, "
Solon Marks, M. D.,	"	Chas. W. Oviatt, M. D.,	Oshkosh, "
P. H. McGovern, M. D.,	"	L. H. Prince, M. D.,	Palmyra, "
Gilbert E. Seaman, M. D.,	"	H. Reinecking, M. D.,	Milwaukee, "
Wm. H. Washburn, M. D.,	"	W. T. Sarles, M. D.,	Sparta, "

Annual Subscription, - - - $2.00. Single Copies, - - - - - $0.20.

Address all business communications to
M. M. TAYLOR, Business Manager,
709 Herman Bldg., Milwaukee, Wis.

Vol. II. APRIL, 1904. No. 11.

EDITORIAL COMMENT.

VALE HIPPOCRATES.

Modern excavators are iconoclasts, overturning history and settled traditions as unceremoniously as they do the clay or sand in which they dig; they smash the idols that men have bowed down to as remorselessly as Cromwell's soldiers smashed church images.

The last prominent character to receive a deadly blow from iconoclastic weapons is our own Hippocrates, who for centuries has re-

ceived homage as the "Father of Medicine"; but according to the new found records, our reputed father is a modern upstart posing in a mantle which belongs to another and an older man.

History informs us that Hippocrates was born on the Island of Cos in the year 465 B. C., and that he ultimately became second only to the God of Medicine, Aesculapius, from whom, according to tradition, he was seventeenth in descent. Even this pedigree no longer entitles either Hippocrates or Aesculapius to maintain their old time prestige. There is another Richmond in the field, and it looks as though he had come to stay. His patronymic is yet unknown but this is merely a question of time--and digging.

Recent excavations (January, 1903) in Babylonia, or to be accurate, in the old city of Susa, brought to light a code of laws—the most ancient and the most remarkable yet discovered. They are engraved upon a block of black diorite eight feet high which was set up where all who wished could read.

They were codified and promulgated by Hammurabi, King of Babylonia, 2250 B. C., thus antedating the laws of Moses by more than 700 years—indeed the Mosaic code contains several laws identical with those found in this code of Hammurabi, which have become the germ of laws that have existed ever since.

In this code King Hammurabi shows that the art of the physician and surgeon was cultivated and had attained high rank in Babylon; that medicine was specialized, and the king thought proper to forbid certain surgical operations by providing very effective penalties—one is almost tempted to add that it would be useful if they were in force to-day. He established a fee table, and for certain surgical operations, ordered larger fees to be paid than are usual at this time. It also appears that discriminations were made in the use of instruments and it is not a serious stretch of imagination to assume that cleanliness was made compulsory; perhaps asepsis was meant.

Not only was medicine and surgery practiced and protected by the law, but veterinary surgery was recognized and provided for.

One section of this code provides that if a physician operated on a man, for a severe wound, with a bronze lancet and cured the man, or had opened an abscess of the eye of a "gentleman," he shall take ten shekels of silver for a fee.

If the patient was a "freeman" the doctor was to receive five shekels, but if a slave then the doctor received two shekels of silver.

Another section provides that if the doctor treated a gentleman for a severe wound with a lancet of bronze and caused the gentleman to die, or opened an abscess of the eye with a bronze lancet and caused the gentleman to lose his eye, one shall cut off the doctor's hands.

If the doctor treated a severe wound of a slave with a bronze lancet and caused his death, he shall render slave for slave; or if he opened the abscess with a bronze lancet and made him lose his eye he shall pay money, half his price.

If the doctor has set a broken bone or cured the shattered limb of a gentleman, or has cured his diseased bowel, the patient shall give five shekels of silver to the doctor. If he was the son of a poor man, then three shekels of silver was the fee, and if a slave two shekels of silver must be paid to the doctor.

The "bronze lancet" is mentioned particularly, as though there might have been other lancets in use, and the penalty for using a bronze lancet unsuccessfully was made purposely severe. It may be that a bronze lancet was thought to be more likely to produce disastrous results than some other lancet, and the severe penalties were prescribed to restrict its use.

It is apparent that the practice of medicine and surgery was not a new profession at that time; it was old enough and important enough to be regulated by law in both its practice and the compensation therefore.

The practice of the veterinary physician is made a separate section, and states that if a veterinary physician, or a cow or sheep doctor, has treated a cow or sheep for a severe wound and cured it, the owner of the cow or sheep shall give one-sixth of a shekel of silver to the doctor as a fee, but if he treated the animal and caused it to die, the doctor shall give a quarter of its price to the owner.

Here are laws regulating the practice of medicine and surgery, promulgated 1800 years before Hippocrates was born and more than 700 years before the birth of Moses, the great law-giver. The expressions used concerning disease or injury and their treatment are such as to indicate familiarity with them, which presupposes technical knowledge; and as we know that the Babylonians of that date were a studious people having a graded system of education extending from primary instruction through an academic course, it is more than probable that medicine and surgery received the attentive study its importance demands. Whether the study was carried on in schools or otherwise, is not definitely known, but there are reasons for believing that there were such schools.

Several sets of tablets have been excavated relating to disease. One series of nine tablets deals almost entirely with diseases of the brain, and in the literature of that period, derangement or insanity is mentioned as though the disorder was so well understood as to be a matter of common knowledge.

Verily there is nothing new under the sun.

To Aesculapius as the God, and to Hippocrates as the Father of Medicine, we make obeisance on the score of old acquaintance, and exclaim "Hail, and Farewell."

STRENGTH IN ORGANIZATION.

The physicians of Colorado who labored so earnestly and laboriously for an effective state medical act, deserve our generous sympathy in the failure their efforts have met. We of Wisconsin who until recently saw, year after year, the frustration of the many attempts to alter and improve existing laws, cannot so soon forget the many trials of the legislative sessions and the earnest deliberations with only rebuffs as a reward for our pains. A defeat was, however, not love's labor lost; each defeat rather whetted the desire for another onslaught, and made all the more evident the vulnerable points. When the successful attack was finally made it was successful only because the vulnerable points were foremost in our minds, and because of the broad, liberal and tolerant policy pursued. The Governor of Colorado vetoed a bill that had passed the House by a vote of 56 to 3, and the Senate by 29 to 2; this defeat must not detract from the implied success of the movement as seen in the vote. We can well appreciate the labor it entailed on the part of the Legislative Committee to succeed in bringing about so solid a favorable vote, and the reasons offered for this are best given in the Secretary's words: "this was easy of accomplishment by reason of their being able to approach the legislature as a united profession; and I cannot emphasize too strongly the absolute necessity of the members of the regular profession recognizing the fact that all future effort to secure medical legislation of any kind, to be successful, must be pre-arranged by some joint committee or non-sectarian organization."

This paragraph strikes the keynote of the situation, and now that our reorganization gives us a feeling of stability and strength, we may hope to look forward to presenting, with our next efforts at legislation, arguments that are forceful and have the weight of general support of a united Wisconsin profession.

THE "NASTY AD." AGAIN.

An editorial in a recent issue of a contemporary emphasizes a point made by us in the editorial columns of our last issue, *viz.*, the unwillingness of newspaper publishers to rid their columns of dirty advertisements, loathsome pictures and immoral suggestions. The edi-

tor-publisher of the newspaper taken to task by our contemporary is now before the people as an aspirant to the highest office they can bestow upon any American. In his editorials there is a tone of morality and a sincere conviction favoring reform, honesty and decency, which might be considered a reflection of his own moral sense were it not more than counterbalanced in the business columns of his paper by an utter abandonment of all decency; thus must he be considered a moral poseur, generously distributing beautiful thoughts to the people whom he is trying to interest in his candidacy, yet at the same time besmirching himself and tainting them by sowing seeds of immorality —even among those to whom he is preaching.

A New York physican wrote to this editor-publisher to the effect that, if he posed as a great reformer and moral teacher, he ought at least in all decency to exclude from his publication those "advertisements which bear the stamp of deceit, humbug, and immorality," and further that "the restoring of lost manhood, the curing of venereal diseases in ten days, the sure production of the monthly flow, the providing of a retreat for ladies in interesting circumstances, are certainly not the domain or the office of a moral reformer."

The great reformer answered not, nor have the columns of his paper been purged of their indecencies.

NEWS ITEMS.

Removal of Editorial Office.—The editorial office of the JOURNAL will, after May 1st, be at the Goldsmith Building, 141 Wisconsin Street, Milwaukee.

U. S. Association for the Study of Tuberculosis— At a meeting held at the College of Physicians, Philadelphia, March 28, a committee consisting of Drs. E. L. Trudeau, Geo. M. Sternberg, W. H. Welch, L. F. Flick and H. M. Biggs, was appointed to effect the organiaztion of the U. S. Association for the Study of Tuberculosis.

A paper by Dr. Maragliano of Genoa, Italy, was read for him, in which as a result of 34 years' observation, the conclusion was expressed that it is possible to employ a specific therapy against tuberculosis and also to immunize the animal organism against the disease, and that there is good reason to hope for an anti-tuberculous vaccination for man.

State Board Examination—At the last examination held by the Wisconsin State Board of Medical Examiners, 7 applicants appeared for examination; 5 passed, 1 failed, and 1 was conditioned. There were also 3 osteopaths, 2 failed and 1 was conditioned.

Decision as to Medical Attendance—The Court of Appeals of the State of New York has rendered a decision that it is unlawful to fail to provide a minor with "medical attendance", and holds that "medical attendance" means actual medical treatment and not faith cures, etc.

State Board of Health Moves— The office of the Secretary of the State Board of Health has been removed to Madison. All communications intended for the Board should be addressed to Dr. C. A. Harper, Secretary, Madison, Wis.

An Ordinance for the Suppression of Tuberculosis which provides for compulsory notification of all cases, disinfection of houses and quarantine, is now being considered by the city council of St. Paul, Minn.

The Milwaukee Hospital Report— During 1903 this institution had under treatment 816 cases, of which 157 were medical, and 613 surgical; 46 cases were remaining in the hospital on Jan. 1st, 1904.

National Guard Hospital Corps—The Adjutant-General of Wisconsin has issued an order organizing a hospital corps in the National Guard on the lines of the hospital corps of the regular army.

Isolation Hospital Bond Issue—At the recent municipal election in Milwaukee, the issuance of $50,000 of bonds for the purpose of the erection of a new Isolation Hospital was authorized.

State Tuberculosis Sanitarium—Minnesota will establish a sanitarium to which county commissioners may send free, indigent persons suffering from incipient consumption.

Dr. Anton F. Blocki, Rush Medical College, 1892, died from hepatic disease, at his home in Sheboygan, March 6, aged 37 years. He was health officer of Sheboygan.

Measles at the University—There is an epidemic of measles among the students of the University of Wisconsin. It is reported that over 100 cases have occurred.

Dr. Theophilis Smith died at Wausau, February 27, aged 87. He was a graduate of Jefferson Medical College, and at one time was postmaster of Wausau.

Removals— Dr. F. W. Starr, of Royalton, has removed to Stanley, Wis.
Dr. G. F. Hilton, of Symco, has removed to Sturgeon Bay.

Dr. Bernard Zartzin, a well known German physician, who has practiced medicine in Milwaukee for the past 20 years, died April 6.

Patent Medicine Firm Fails.—The failure of the Green Nervura Company, capitalized at $2,800,000 is announced.

Anti-Spitting Ordinance Lost.—The common council of Milwaukee, by a vote of 21 to 20, sustained the mayor's veto of this measure.

Dr. Robert Minahan has been elected mayor of Green Bay on a platform of "anti-graft."

CORRESPONDENCE.

BALTIMORE LETTER.

Two meetings of the Johns Hopkins Hospital Medical Society have been held during the month of January. The meeting of January 4th was opened by Dr. Kemp with a report of some observations on the *effects of altitude on the blood.* The observations were made on a trip from Champaign, Illinois, to Cripple Creek. He confirmed the old observation that the count of the red corpuscles rose in going from a low to a high altitude, found an increase in the percentage of hemoglobin and also noted that there was an increase in the number of blood platelets. He estimated the number of platelets by first counting the red corpuscles and then finding the ratio of the number of platelets to the number of corpuscles. He found that in making the ascent the ratio of platelets to corpuscles fell, thus showing an actual rise in the number of the former. Another interesting observation made by Dr. Kemp was the presence of hemoglobin in the platelets after a week's stay at the high altitude. This observation may throw some light on the much disputed question of the origin of the blood plaques. The rest of the evening was taken up by an interesting talk and lantern demonstration by Dr. Dock of Ann Arbor on the subject of Vaccine and Vaccination. The talk was largely in the nature of a historical sketch of the subject.

On January 18th three papers were read. The one which attracted the most interest was by Dr. Erlanger on some recent observations on the *blood pressure in relation to a case of cyclic albuminuria.* The most interesting point brought out by Dr. Erlanger's work was the inaccuracy in the instrument now so largely used throughout the country in estimating the blood pressure. This instrument, known as the Riva-Rocci, records only the maximum systolic pressure. Dr. Erlanger has demonstrated that the mean blood pressure is much nearer the minimum than the maximum and hence the inaccuracy of the results obtained with an instrument which records maximum pressure only. He has devised an instrument by which the maximum pressure can be recorded.

The second paper was by Dr. Gamble on mental derangement in visceral disease with special reference to cardiac disorders. The program was closed by Dr. Sampson with a talk on the blood supply of the ureters in relation to the operation for the removal of cancer of the uterus.

During the last week in January a *Tuberculosis Exposition* was held in McCoy Hall of the Johns Hopkins University under the auspices of the Tuberculosis Commission of Maryland conjointly with the Maryland State Board of Health, and Maryland Public Health Association. The exhibits consisted of statistics, photographs showing the relation of factory, tenement and sweat shop to tuberculosis, models and pictures illustrating methods of treatment and prevention of tuberculosis and a large collection of pathological and bacteriological material. During the week a meeting was held each evening to which the general public was invited. The program was as follows:

Monday, Jan. 25th—Opening address, Gov. Edwin Warfield of Maryland. Addresses by Mayor McLane of Baltimore and Dr. Wm. Osler, and a paper

by Mr. Frederick Hoffman of Newark, N. J., on "The Statistical Laws of Tuberculosis."

Tuesday, Jan. 26th—Address by Dr. L. T. Flick of Philadelphia, on "House Infection of Tuberculosis."

Wednesday, Jan. 27th—Dr. M. P. Ravenel, of Philadelphia, on "Bovine Tuberculosis, a Factor in Human Tuberculosis." Dr. D. E. Salmon of Washington on "Some Observations on Tuberculosis of Animals."

Thursday, Jan. 28th—Dr. S. A. Knopf, of New York, on "Pulmonary Consumption and the Possibilities of Its Eradication Through the Combined Action of Wise Government, Well Trained Physicians and an Intelligent People."

Friday, Jan. 29th—Dr. G. J. Adami, of Montreal, on "Facts, Half Truths and the Truth About Tuberculosis."

Saturday, Jan. 30th—A lantern demonstration on the Pathology of Tuberculosis, by Dr. W. H. Welch and Dr. C. H. Potter.

These meetings were largely attended by the laity of Baltimore as well as the medical profession, and the city is to be congratulated on the interest taken in this all important subject. (R. G. W.)

A STATEMENT OF FACTS IN A MALPRACTICE SUIT.

Editor Wisconsin Medical Journal: In reply to your kind offer to publish a statement of the facts in the case for which action was recently commenced against Dr. Sutherland and myself, and which was so widely published throughout the state, I would say that the child upon whom we operated had been suffering from a paralysis of the left side down to the leg, which later affected the anterior tibio-fibular group of muscles of the right leg also, so that he walked on the ball of the foot and toes. I had planned making a tendo-plastic operation to correct the deformity. Dr. Sutherland brought the child into the operating room and prepared the wrong foot. My attention was at this time called to the boy who suffered from an organic heart lesion and took the anesthetic so badly that I was obliged to resuscitate him. When Dr. Sutherland said the foot was ready I performed the operation in a few minutes and stopped the anesthetic. When we discovered our mistake I sutured the tendons in their proper place again, and closed the skin, and operated upon the right foot. The wounds healed by primary union and the child left the hospital at the end of the fourth week in excellent condition and with perfect form and function of the left foot. We have not seen him since this time. I learn from Dr. J. I. Fleck of this city, who recently examined the boy, that the result on the crippled foot is good, so that he walks well, and that he has suffered no material injury to the left foot. The people belong to that class who are out for money and think doctors a good "mark." Both Dr. Sutherland and I carry policies with the Fidelity and Casualty Co. of New York, and they have taken hold of the case with vigor, so we hope it may come out all right.

Sincerely yours,

T. W. NUZUM, M. D.

THE STATE MEDICAL SOCIETY OF WISCONSIN.

ORGANIZED 1841.

Officers for 1903-1904.

F. E. WALBRIDGE, Milwaukee, President.

JAMES MILLS, Janesville, 1st Vice-Pres. C. C. GRATIOT, Shullsburg, 2nd Vice-Pres.

CHAS. S. SHELDON, Madison, Secretary. S. S. HALL, Ripon, Treasurer.

Provisional Councilors.

1st Dist., J. G. Meachem, - - - - Racine	7th Dist., W. T. Sarles, - - - - Sparta
2nd Dist., J. S. Walbridge, - - - - Berlin	8th Dist., J. F. Pritchard. - - Manitowoc
3rd Dist., C. S. Smith, - - - - - Elroy	9th Dist., T. J. Redelings, - - Marinette
4th and 5th Dist., G. A. Kletzsch, - Milwaukee	10th Dist., J. M. Dodd, - - - - Ashland
5th Dist., Geo. V. Mears, - - - Fond du Lac	11th Dist., E. L. Boothby, - - - Hammond

Next Annual Session, Milwaukee, June, 1904.

The Wisconsin Medical Journal, Official Organ.

SOCIETY PROCEEDINGS.

REORGANIZATION NOTES.

Substantial progress has been made during the past month. Vilas County has reported and received a charter. Kenosha, Dodge and Brown have all reported and received charters. The newly organized Trempealeau-Jackson County Medical Society has been granted a charter. This makes 51 chartered county societies, and from present prospects there will be 9 more—making an even 60 county societies in the state. The Buffalo-Pepin and the Forest-Florence County Medical Societies have been organized but have not yet reported. This leaves but 6 counties unorganized: Adams in the 2nd district, Richland in the 3rd, Calumet and Waushara in the 8th, and Door and Kewaunee in the 9th. Of these, Councilor Walbridge expects to unite Adams to one of the adjacent counties. A vigorous effort will be made to either unite Richland to Crawford, or organize a separate society. Councilor Pritchard writes that he expects to organize Calumet soon as a separate society, and join Waushara to Green Lake. Councilor Redelings plans to soon organize Kewaunee and Door into one society. If possible, the reports of these counties should be sent in during the present month. The two most difficult districts to organize—the 10th and 11th—are now completed. Dr. Boothby early finished the work in the 11th district, and Dr. Dodd has just completed his. Too much praise can not be given these tireless workers and efficient organizers.

The Annual Reports from the County Secretaries have begun to come in. Thus far they are very full and correct. In case of those who have not sent in personal records, much of the data can be obtained at the office of the county clerk. There need be no confusion concerning the matter of dues if the circular sent to the county secretaries be carefully read. All counties reporting and sending in dues after Oct. 13th have no dues to pay for 1904. Those reporting *before* that date will send in $1.00 for each *new* member who has paid his dues for 1903, and $2.00 for each former member of the State Society.

The plan of forming district societies, proposed in the model Constitution is likely to play a useful and important rôle in perfecting the state organization. Some have already been organized by Councilor Boothby in the 11th district, and Councilor Dodd has made arrangements for organizing one in the 10th district. It is likely, however, that the boundaries of these societies—especially in the southern part of the state—will be determined rather by railroad facilities and convenience of access, than by the councilor districts. They will form a most useful connecting link between the county and state societies and will materially assist in maintaining the integrity and permanence of the county organizations.

The Annual Meeting of the State Society occurs in a little more than two months. It is not only the fond hope, but the confident expectation that it will prove a grand reunion of the whole profession of the state. The House of Delegates will hold a session on the evening of the 21st. Every delegate will be expected to be in his place at that time. If possible, every county secretary also should be present at the meeting and gain the inspiration which such a gathering affords. It is likely that the membership will reach at least 1,300, and we should have present 500 or 600 of the physicians of the state. The program is now practically completed, and will be printed in full in the May number of the JOURNAL. The Program Committee regrets that so few members outside Milwaukee have sent in volunteer papers, or have consented to write papers when invited to do so. Henceforth an effort will be made to utilize the best material offered in the county societies and a more equable division will be effected. The program, however, is excellent in every respect and fully up to the highest standard.

From now till June 22nd—let us all plan to be present at the meeting without fail. You owe it to the profession of the state. Moreover, it can not fail to be of great benefit to you personally.

C. S. S.

DIRECTORY OF COUNTY SOCIETIES.

COUNTY.	PRESIDENT.	SECRETARY.
Ashland	W. T. Rinehart, Ashland.	N. N. Glim, Ashland.
Barron-Gates-Polk	O. M. Sattre, Rice Lake..	I. G. Babcock,Cumberla'd
Bayfield	.....	J. B. Hicks, Washburn.
Brown	B. C. Brett, Green Bay..	W. T. Hagen, Green Bay.
Chippewa	C. A. Hayes, Chipp.Falls.	R. B. Cunningham,Cadott
Clark	.....	V. M. French, Neillsville.
Columbia	J. J. Howard, Columbus.	F. D. Bentley, Portage.
Dane	C. A. Harper, Madison..	R. H. Jackson, Madison.
Dodge	E. M. McDonald, B. Dam.	H. B. Sears, Beaver Dam.
Douglas	George Saunders.....	W. W. Pretts, Superior.
Dunn	E. H. Grannis, Menomo'e.	G. A. Barker, Menomonie
Eau Claire	J.V.R.Lyman,Eau Claire.	H. A. Fulton, Eau Claire.
Fond du Lac	J.H.McNeil, Fond du Lac.	Flora A.Reed,FonduLac.
Grant	J. Oettiker, Platteville..	P. L. Scanlan, Lancaster.
Green	Sam'l Moyer, Monroe...	Wm. B. Monroe, Monroe.
Green Lake	C. E. Thayer, Markesan.	B. E. Scott, Berlin.
Iowa	W. J. Pearce, Dodgeville.	S. P. Deahofe,Mineral Pt.
Iron	J.H.Urquhart, Iron Belt.	T. J. Hambley, Hurley.
Jefferson	Wm. W. Reed, Jefferson.	C. E. Lander,Johnson C'k
Juneau	J. B. Edwards, Mauston.	A. T. Gregory, Elroy.
Kenosha	G. T. Kimball, Kenosha..	A.VanWestriener,Ken'sha
La Crosse	F. C. Suitor, La Crosse..	C.H.Marquardt,La Crosse
Lafayette	E. S. Hooper, Darlington.	C.Lehnkering, Darlington
Langlade	I. D. Steffen, Antigo....	Frank I. Drake, Antigo.
Lincoln	W. H. Monroe, Merrill..	C. C. Walsh, Merrill.
Manitowoc	Louis Falge, Reedsville..	J. E. Meanv, Manitowoc.
Marathon	D. La Count, Wausau...	H. L. Rosenberry,Wausau
Marinette	T.J.Redelings, Marinette.	A. T. Nadeau, Marinette.
Marquette	W.Thompson, Briggsville.	W. O. Dyer, Westfield.
Milwaukee	G.E.Seaman, Milwaukee.	A. W. Gray, Milwaukee.
Monroe	G. R. Vincent, Tomah...	C. M. Beebe, Sparta.
Oconto	.....	A. S. White, Gillett.
Oneida	C.D.Packard, Rhinel'der.	S. R. Stone, Rhinelander.
Outagamie	G. A. Ritchie, Appleton..	M. J. Sandborn, Appleton
Ozaukee	E. E. Couch, Pt. Wash..	.....
Pierce	Dr. Cotton, Prescott....	D.Woodworth, Ellsworth.
Portage	Galen Rood, Stevens Pt..	C.v.Neupert,Jr.,Stev's Pt.
Price	W. P. Sperry, Phillips...	A. D. Gibson, Park Falls.
Racine	W. S. Haven, Racine....	C. F. Browne, Racine.
Rock	Ernest C. Helm, Beloit.	G. W. Fifield, Janesville.
Sauk	Chas. Gorst, Baraboo...	G. L. Cramer, Baraboo.
Shawano	W.H.Cantwell, Shawano..	H. W. Partlow, Shawano.
Sheboygan	O. J. Gutsch, Sheboygan.	H. C. Reich, Sheboygan.
St. Croix	E.L.Boothby, Hammond..	L. P. Mayer, Hudson.
Taylor	E. LeSage, Medford.....	J. H. Francis, Medford.
Vernon	.....	C.H.Trowbridge, Viroqua
Walworth	.....	W. A. Loops, Darien.
Washb'n-Sawy'r-Burn'tt.	J.B.Trowbridge, Hayw'd.	E. R. Hering, Shell Lake.
Washington	H. Blank, Jackson.....	G. A. Heidner,West Bend
Waukesha	B. M. Caples, Waukesha.	A. J. Hodgson,Waukesha.
Waupaca	L. H. Pelton, Waupaca..	J. F. Corbett,Weyauwega.
Winnebago	G. M. Steele, Oshkosh...	S. B. Ackley, Oshkosh.
Wood	O. T. Hougen, G. Rapids.	F. Pomainville, G.Rapids

DUNN COUNTY MEDICAL SOCIETY.

The March meeting of the Dunn County Medical Society was held in the parlors of the Royal Hotel, Menomonie, March 15, 1904. The president, Dr. E. H. Grannis, in the chair.

Drs. C. W. Blanchard, of Knapp, and E. A. Wright, of Colfax, were elected to membership.

The question of the recurrence of measles, scarlet fever, etc., was brought up and discussed by Drs. Larson, Denham and others.

Dr. A. F. Heising read a paper describing a case of Acromegaly. Discussed by Dr. Butler and others.

Dr. E. H. Grannis read a paper, supplemented by diagrams, on "How to Read a Skiagraph", which was much appreciated.

After some discussion a motion was made and carried that it was the sense of the society that the fee fixed for medical examinations in fraternal societies is too small and that the State society be urged to work to raise the same.

At the conclusion of the session a dinner was served.

G. A. BARKER, M. D., Secretary.

FOREST COUNTY MEDICAL SOCIETY.

At a meeting held on March 23, the Forest County Medical Society was organized on the standard plan with the following officers: President, Dr. C. A. Decker; vice-president, Dr. H. P. Chambers; secretary and treasurer, Dr. S. M. B. Smith, Crandon.

S. M. B. SMITH, M. D., Secretary.

GREEN COUNTY MEDICAL SOCIETY.

The second quarterly meeting of the Green County Medical Society was held in the Court House at Monroe, March 8th. The visiting members were given a banquet at the Ludlow House at 1 p. m. by the local members of the society. Twenty-one members sat down to the banquet table and considering the fact that there are only thirty physicians in the county, this speaks well for our enthusiasm. All are imbued with a commendable spirit for scientific improvement in the line afforded by medical society work. The benefit derived from our County organization, although in existence only four months, is already manifest in more ways than one.

The president of the society presided at the banquet and toasts were responded to as follows: "The Humorous Side of a Physician's Life", by Dr. F. W. Byers, Monroe; "The Grave Side of a Physician's Life", by Dr. Dwight Flower, Monticello; "The Doctor and the Church", by Rev. E. C. Dixon, Monroe; "Christian Science and the Science of Medicine", by Dr. J. L. Fleek, Brodhead.

At the business meeting which followed the banquet there was no formal program or reading of scientific papers. The time was short and was devoted to the discussion of business affairs of the profession of the county, and receiving reports of various committees. Following the business meeting the balance of the time was consumed in discussion and in the exhibition of pathological specimens.

S. R. MOYER, M. D., President.

LAFAYETTE COUNTY MEDICAL SOCIETY.

The first quarterly meeting of the Lafayette County Medical Society will be held in the Court House, Darlington, Tuesday, April 12. The following program will be presented:

MORNING SESSION, 10:30.

Gastric Ulcer: Report of Cases, M. C. Barber; discussion by A. McKellar and T. J. Buckley.

Cystitis, F. M. Bair; discussion by S. Birkbeck and C. F. Lehnkering.

Differential Diagnosis and Treatment of Diphtheria, C. G. Dwight; discussion by E. A. Dunn and A. D. Brown.

BANQUET AT HOTEL MEEHAN 1:30 P. M.

W. W. Peck, Toastmaster.

Responses by the members.

Poem, R. J. Fairchild.

AFTERNOON SESSION, 3:00 O'CLOCK.

Albuminuria During Pregnancy: Report of Cases, D. L. Hansen; discussion by W. W. Peck and D. W. Hogue.

General discussion of Pneumonia by all members present.

MEDICAL SOCIETY OF MILWAUKEE COUNTY.

Meeting of March 11, 1904.

The President, G. E. Seaman, in the chair. Nine new members were elected.

Dr. C. O. Thienhaus reported a case of dislocation of the hip which he had reduced and placed in plaster cast. He exhibited X-Ray photographs to confirm his diagnosis. Three months thereafter there developed anterior poliomyelitis. He also reported a case of epiphyseal separation of the great trochanter of which there are but thirteen cases in literature. In this, function of leg was good, except in power to hold weight of body; passive and active motion normal in all directions. Ten of the cases reported have died of osteomyelitis. Dr. Thienhaus also reported a fracture of the astragalus, which class of fractures, he said, are more frequent than formerly supposed since X-Ray diagnosis has been used. This case he saw five months after the accident, the astragalus was excised and the malleoli were brought into relation with the os calcis. Dr. W. Becker asked concerning the location of the anterior polio-myelitis and if the development of this condition might not have been due to injury during reduction. Dr. Thienhaus replied that the inflammatory condition occurred three months after reduction—too late to have been caused thereby.

Dr. O. Fiedler gave a demonstration of the methods of the Milwaukee Health Department, which was instructive and called forth many questions from the physicians present.

Dr. A. W. Myers reported an "Unusual Case of Vicarious Menstruation."

A. W. GRAY, M. D., Secretary.

TREMPEALEAU COUNTY MEDICAL SOCIETY.

A meeting was held at the office of Dr. Jegi, Galesville, March 17, for the purpose of organizing a County society. The following officers were elected: President, Dr. G. N. Hidershide, Arcadia; vice-president, Dr. Wm. E.

Parker, Whitehall; secretary and treasurer, Dr. Henry A. Jegi, Galesville; delegate, Dr. Joseph Littenberg, Arcadia; board of censors, Drs. G. H. Lawrence, Wm. E. McFarlum and J. A. Palmer.

The next meeting will be held at Whitehall, March 29, to perfect the organization.

H. A. JEGI, M. D., Secretary.

VILAS COUNTY MEDICAL SOCIETY.

The physicians of Vilas County met on Feb. 2 and organized a county society with the following officers: President, Dr. A. B. Rosenberry; vice-president, Dr. T. G. Torpy; secretary and treasurer, Dr. W. E. Wray, Minocqua; delegate, Dr. A. B. Rosenberry; board of censors, Drs. W. J. Pinkerton, R. C. Aylward and T. G. Torpy. After a general and informal discussion the meeting adjourned.

W. E. WRAY, M. D., Secretary.

WASHINGTON COUNTY MEDICAL SOCIETY.

The regular quarterly meeting of the Washington County Medical Society was held at Hartford, March 30. Ten out of the 14 members of the society were present. The president, Dr. H. Blank, in the chair.

The program consisted of the following papers: "Sciatica", Dr. G. H. Rheingans, South Germantown; "Neurasthenia", Dr. H. H. Albers, Allenton; "Acute Tonsillitis", Dr. E. H. Ehlert, Hartford.

Some clinical material was also presented and the meeting was an enthusiastic one.

The next meeting will be held at Jackson, June 29.

G. A. HEIDNER, M. D., Secretary.

(NOTE—Dr. Albers' paper will be published in the JOURNAL.)

WAUPACA COUNTY MEDICAL SOCIETY.

The regular quarterly meeting of the Waupaca County Medical Society was held at Waupaca, March 29.

Dr. B. C. Gudden, of Oshkosh, presented a very interesting paper on "Diagnosis and Treatment of Gall-Stones."

The next meeting will be held at Manawa, June 28.

J. F. CORBETT, M. D., Secretary.

FOX RIVER VALLEY MEDICAL SOCIETY.

The Fox River Valley Medical Society is making an effort in the right direction and the program they have outlined for the year's work will insure them a large attendance at their gatherings, and plenty of desirable and instructive discussion. The following circular letter and program sent to the members will explain:

Appleton, Wis., March 1, 1094.

DEAR DOCTOR:—At the annual meeting of the Fox River Valley Medical Society in 1903, the following resolutions were adopted:

"*Resolved*, That a committee be appointed by the President, at each annual meeting, with the Secretary of the Society as chairman, to select subjects and assign members for papers for each meeting throughout the year.

"The program shall, if possible, be made out in full, with names of subjects and writers, together with names of those who are to open discussion and copies of the program shall be sent to each member.

"Any member having been selected to write or discuss a paper may arrange, if he so desire, with the chairman of this committee for a substitute."

In accordance with these resolutions the committee have prepared the subjoined program, and it is hoped that every member will fill the place assigned him or at least produce a substitute.

This program is not intended to prevent the reading of volunteer papers. They will always be welcome and the titles can be sent to any member of the committee in advance of the publication of the quarterly notices.

At each meeting there will also be a paper by an invited guest.

Very respectfully,

J. S. REEVE,
J. R. MINAHAN,
B. C. BRETT,
J. R. BARNETT.

THE YEAR'S PROGRAM.

APRIL 19, 1904.

Rheumatism and Allied Affections, Dr. J. R. Barnett, of Neenah.
DISCUSSION by Dr. F. W. Jones, of Appleton; Dr. R. G. Marriner, of Menominee, Mich.

Surgery of the Thyroid Gland, Dr. W. H. Earles, Milwaukee.
DISCUSSION by Dr. A. H. Levings, of Milwaukee; Dr. C. W. Oviatt, of Oshkosh.

JULY 19, 1904.

Meningitis, Dr. J. Frank Ford, Omro.
DISCUSSION by Dr. W. G. Nicholson, of Green Bay; Dr. H. A. Vennama, of Menominee, Mich.

Ostcomyelitis, Dr. N. P. Mills, of Appleton.
DISCUSSION by Dr. T. J. Redelings, of Marinette; Dr. P. J. Noer, of Menominee, Mich.

OCTOBER 18, 1904.

The Use and Abuse of Antipyretics, Dr. W. B. Hill, of Milwaukee.
DISCUSSION by Dr. G. M. Steele, of Oshkosh; Dr. W. E. Minahan, of Fond du Lac.

Carcinoma of the Breast, Dr. F. Shimonek, of Milwaukee.
DISCUSSION by Dr. B. C. Gudden, of Oshkosh; Dr. I. N. McComb, of Brillion.

JANUARY 17, 1905.

Treatment of Drug Habit, Dr. Richard Dewey, of Wauwatosa.
DISCUSSION by Dr. T. L. Harrington, of Milwaukee; Dr. W. A. Gordon, of Oshkosh.

Puerperal Infection, Dr. R. E. Minahan, of Green Bay.
DISCUSSION by Dr. B. C. Brett, of Green Bay; Dr. M. J. Sandborn, of Appleton.

MILWAUKEE MEDICAL SOCIETY.

Meeting of March 8, 1904.

Dr. A. N. Baer exhibited a case of Tuberculous Arthritis of the Knee Joint, which is still under treatment. He promised to exhibit the case again to demonstrate the result of treatment. Discussion by Drs. Mishoff, Beffel, Thienhaus and Walbridge.

Dr. Shimonek reported a case of *Empyema of the Thorax* in which the abdomen was accidentally opened through the diaphragm while doing a rib resection. He also reported a case of Ectopic Gestation with operation. Discussion by Drs. Beffel and Theinhaus.

Dr. F. E. Walbridge reported two cases of Appendicitis, exhibiting specimens. He urged the advisability of early operation. He exhibited greatly

enlarged right and middle lobes of prostate which had been removed. Discussion by Drs. Shimonek and Barth.

Dr. A. J. Puls exhibited a number of interesting gynecological specimens giving brief histories of the cases. Discussion by Drs. Beffel and Shimonek.

H. E. DEARHOLT, Secretary.

SOCIETY OF GERMAN PHYSICIANS AT MILWAUKEE.

At the annual meeting held March 5th, 1904, the following officers were elected for the ensuing year: President, Dr. S. Graenicher; secretary, Dr. C. Zimmermann; treasurer, Dr. L. F. Frank. Dr. N. Senn, Chicago, was elected honorary president.

Dr. Senn reported a case of intra-articular lipoma in a man who had suffered for several years from intermittent pains, sometimes so severe that he fell down. The examination with X-Rays was negative. At the operation serous exudation, swelling of the synovialis, and a subsynovial tumor, 4 cm. long and 2 cm. wide, were found. Extirpation with synovialis. Uneventful recovery.

Dr. Senn then read a paper on "Tahiti From a Medical Standpoint."

Dr. E. Kovats presented the unique case of a girl, aged 12, who could whistle with the larnyx, keeping the mouth open. She imitated the notes of various birds and whistled some well known melodies.

Dr. A. J. Puls exhibited a patient with syphilitic arthritis of the knee-joint.

C. ZIMMERMANN, M. D., Secretary.

NORTHWESTERN BRANCH OF THE PHILADELPHIA COUNTY MEDICAL SOCIETY.

March 10, 1904.

A GENITO-URINARY SYMPOSIUM.

DR. H. R. LOUX, Chief of Genito-Urinary Clinic, Jefferson Medical College Hospital, read a paper entitled:

The Local Treatment of Gonorrheic Infection.

The speaker stated that during the past year and a half the results at his clinic at the Jefferson Hospital and in private practice, had been much better than ever before; this statement he based upon the observation of several thousand cases of gonorrhea at all stages. The reasons for this improvement he ascribed to careful local treatment in which he abandoned, absolutely, the use of any drug as an injection which can cause the slightest irritation. Dr. Loux stated that, in a general way, his methods of treatment were as follows: For acute gonorrhea, he prescribes light diet, with very little meat, no fats, fruit or alcoholic beverages, but allows as much skimmed milk as the patient can drink. If the infection is confined to the anterior urethra, he prescribed the injection of two drachms of a ten per cent. solution of argyrol, held in the urethra ten minutes; this injection is made in the morning, at noon and at night. Internally, he prescribes capsules of copaiba, cubebs and sandalwood three times daily. This treatment is practiced for one week, during which time the discharge will almost if not entirely cease, there will be no pain or irritation by the injection or upon urination, and the gonococci will disappear.

If, at the end of one week, the urine remains continuously shreddy, a weak solution of astringents is employed and of these drugs he preferred zinc sulphate, iodide, chloride, hydrastin or berberine muriate, but emphasized that these astringents should not be used during the first week of the disease and never in solutions sufficiently strong to produce pain or irritation.

If the two-glass test shows cloudy first and second portions of the urine, showing the presence of antero-posterior urethritis, he irrigates the anterior urethra with a warm solution of boracic acid in order to remove the accumulated secretions. Then he makes deep instillations of twenty per cent. argyrol solutions once daily, or on alternate days; the inflammation of the anterior urethra is treated in the manner already described.

Chronic follicular urethritis is readily recognized by endoscopic examination and by palpation of the enlarged follicles over a bougie, and is treated by gradual dilatation of the urethra by means of bougies, massage of the enlarged follicles, and by the local application of 25 to 50 per cent. argyrol solution to the individual enlarged follicles as revealed by the endoscope. This treatment is carried out three or four times a week and is by far the most satisfactory method he had ever found.

Most cases of chronic gleet are due to ulcerative conditions of the urethra and in the management of these the endoscope is indispensable. After determining the exact location of the individual ulcerations, the method of treatment depends upon whether the ulcerations are sharply localized or whether there is a coexistent general hyperemia of the urethra. In the former case, applications of 50 per cent argyrol solution (through the endoscopic tube) to the ulcerations should be made at least three times a week. If general hyperemia exists, the use of mild astringents should precede the topical application of argyrol, in order to rid the urethra of the muco-purulent accumulations. From 4 to 6 weeks of this treatment, with care in the use of instruments, will heal the ulcerations and cure the gleet in the large majority of cases.

Another very common condition is the reduction in the lumen of the urethra by inflammatory exudate, occasioned by repeated attacks of gonorrhea or a primary case of long duration. In these cases, endoscopic examination shows the seat of beginning stricture and the presence of more or less localized inflammation. The management of these cases is extremely important, because of the certainty of the occurrence of organic stricture unless the patient agrees to a several weeks' course of treatment. He should report every third or fourth day for the passage of bougies of gradually increasing sizes, followed, if active inflammation exists, by the deep instillation or topical application of 25 per cent. argyrol solution, depending upon whether the inflammation is circumscribed or more or less diffuse.

The discussion of Dr. Loux's paper was opened by DR. H. M. CHRISTIAN, Professor of Genito-Urinary Surgery, Medico-Chirurgical College.

The speaker stated that it must be borne in mind that we have to deal not only with the gonococci, but with the destructive action of the micro-organism as well; in other words, destruction of the gonococcus does not by any means imply of necessity the cure of the disease, as there always remains a condition of catarrhal urethritis which requires a particular line of treatment. If a case of gonorrhea is seen in the early inflammatory stage, where ardor urinæ and chordee are the most annoying subjective symptoms, Dr.

Christian orders powders containing salol, sodium bromide, potassium bromide, each two and a half grains every two hours. At the same time a 5 per cent solution of argyrol is ordered to be used by the patient as a hand injection three or four times daily, the solution being held in the urethra for ten minutes. If the patient can spare the time it is advisable to wash out the anterior urethra with several syringefuls of warm normal salt solution prior to using the argyrol injection; this line of treatment can be carried on through the second and third week. When the subjective symptoms subside, it is sometimes of considerable advantage to supplement the local treatment with the use internally of copaiba and sandal-wood oil. Ordinarily at the beginning of the third week, the patient enters upon the stage of decline, or, as Professor Finger styles it, the "mucous terminal stage" of the disease. In a case going on to recovery, the discharge is now scanty, then muco-purulent in character and containing few if any gonococci and this is by far the most important stage in the treatment of the disease as regards the patient's future welfare; it is here that experience teaches that we need more than a mere gonoccidal agent. We need here in addition, mild astringent lotions to help restore the integrity of the damaged mucous membrane. A good plan now is to use a 5 per cent. solution of argyrol night and morning, employing through the day some such astringents as zinc, bismuth, hydrastin, lead, berberine, etc. At the beginning of the fifth week when nothing remains but the well-known "morning drop" and the urine is clear but contains shreds, it is well to use the argyrol solution at night and to use once or twice through the day one of the well-known astringent mixtures.

If in the second or third week the clinical symptoms and the two-glass test show involvement of the whole urethra, the treatment by hand injections is temporarily abandoned. Deep instillations of ten per cent. solution of argyrol are then employed at short intervals until such time as the second urine becomes clear.

This in general is the line of treatment that the speaker had used at the University of Pennsylvania and his other clinics for the past two years and is one that has given more satisfactory results than any hitherto employed.

DR. ORVILLE HORWITZ read a paper entitled

The Radical Cure of Senile Hypertrophy of the Prostate: Based Upon a Study of 145 Operations Performed by the Author.

Dr. Horwitz stated that the question under discussion has, with the possible exception of appendicitis, attracted more attention in the surgical world than any other subject. It is well recognized that the danger to the patient with enlarged prostate begins as soon as it is necessary to resort to the daily use of the catheter and when this period arrives a surgeon should be consulted to supervise the case and decide what operative measures are desirable or necessary. It was emphasized that no one operation was suitable to all cases and that each patient is a law unto himself in the matter of choice of operation.

The two operations which have stood the test of experience are prostatotomy by means of the galvano-cautery, (the so-called Bottini operation) and prostatectomy. The speaker stated that the Bottini operation is extremely valuable, safe and always to be preferred to cutting operations in suitable cases. Out of 98 cases operated upon by the author, by the Bottini method, three died, two of uremia, and one of sepsis; all three were very old men.

Twelve cases were lost sight of after leaving the hospital, but were much improved when last examined. This leaves 81 cases, concerning which there was obtained definite knowledge as to results. The ages of the patients varied between 52 and 81 years. The speaker stated that his statistics proved conclusively that the earlier the patient submitted to the operation, the better the results. Of the total 81 Bottini operations, all the patients were either entirely cured or very much benefitted; four required second operation, and a considerable proportion were treated for several months subsequently for accompanying chronic cystitis.

Prostatectomy, the speaker stated, is regarded as a valuable operation, but authorities differ as to when and how it is to be performed. As many as 20 different operations have been suggested. Here, too, the individual case decides methods, choice of operation, etc. The prostatectomies performed by the author were as follows: 3 complete (suprapubic incision); 6 complete (combined supra-pubic and perineal incisions); 7 partial prostatectomies (supra-pubic incision); 34 complete perineal prostatectomies.

Of the 9 complete supra-pubic operations, two died, one of suppression of urine, one of uremia. In all the cases, convalescence was slow; in five cases the ultimate results were all that could be desired.

Of the 34 perineal prostatectomies, six died from uremia, sepsis or shock; six cases were lost sight of after leaving the hospital; sixteen were cured, four markedly benefitted, one unimproved.

Dr. Horwitz summarized the results of observations in his 145 operations as follows:

(1.) A routine method is not applicable to the treatment of prostatic hypertrophy; every case is a law unto itself and the treatment will depend on the various conditions presented in the individual case.

(2.) The dangers attendant on the daily catheterism are greater than those of a radical operation performed at the onset of the symptoms caused by the obstruction.

(3.) The proper time to perform a radical operation is reached as soon as it becomes necessary for a patient to resort to daily catheterism.

(4.) The gratifying results obtained by a number of the operations in many cases demonstrates that the Bottini operation is one of great surgical value. It is applicable to a large percentage of cases; which if properly selected has proved to be the safest and best method of relieving an obstruction caused by prostatic hypertrophy. In those cases in which a stone in the bladder is associated with a prostatic enlargement, lithoplaxy may be performed in conjunction with a galvano-cautery prostatotomy.

(5.) A complete prostatectomy is justifiable if performed early before the individual is broken down in health and secondary complications have intervened. In early operation the results are most satisfactory, recovery rapid, the mortality varying between five per cent and seven per cent.

(6.) A complete prostatectomy in feeble elderly patients with long-standing obstruction and secondary complications, the prognosis is grave and the mortality ranges between fifteen per cent. and eighteen per cent. If the bladder in these cases happens to be hopelessly disabled, the results obtained by the operation are negative. Cases of this description are only suitable for suprapubic drainage.

(7.) In ninety per cent. of all cases the gland can be readily removed by means of a median perineal incision. The perineal operation recommended by Bryson, is considered the operation of choice.

(8.) Complete suprapubic prostatectomy is shown to be more dangerous than the perineal operation for obvious reasons. A suprapubic prostatectomy is safer if combined with perineal drainage.

(9.) Partial suprapubic prostatectomy is indicated in cases where a valve-like lobe exists which interferes with urination, or where there is a partial hypertrophy of one of the lobes.

(10.) A perineal prostatectomy is best suited for those cases where the enlargement of the lateral lobes has a tendency to progress towards the rectum, to obstruct the urethra, or project backwards into the bladder.

(11.) A prostatectomy is always attended with more danger than the Bottini operation and the convalescence is more prolonged. In suitable cases the latter operation is therefore the one of choice.

DR. EDWARD MARTIN, Professor of Clinical Surgery, University of Pennsylvania, discussed the preceding paper as follows:

He agreed with Dr. Horwitz that, if operation has been advised and consented to, the circumstances of the individual case decided which of the several operations is to be performed. He believed that the Bottini operation has proved of great value and is preferable to cutting operations in suitable cases. He did not, however, advise operation in all cases of enlarged prostate. He recognized the inconveniences and dangers attendant upon the daily use of the catheter, but believed in the value of palliative measures in the majority of cases. He recommended care in the selection of catheters and chose one that enters the bladder with the least force and least pain to the patient. If a soft rubber catheter cannot be introduced, a woven elbowed one is to be chosen. If obstruction or spasm necessitates habitual resort to a metal catheter, surgical intervention is required. When patients use the instrument upon themselves, the hands should be washed thoroughly, dipped in bichloride solution, the meatus washed with the same solution, and be provided with an irrigating bag containing one pint of hot argyrol solution, 1 to 1,000. Infection of the bladder is commonly present and should be treated by means of bladder irrigations. For this purpose a fountain syringe, supplied with a catheter should be suspended two feet above the level of the bladder. The anterior urethra is first thoroughly flushed after which the catheter is pushed into the bladder and the urine withdrawn. The flushing of the bladder is continued until the return flow no longer contains pus or mucus. The temperature of the argyrol solution employed should be of the temperature of the body or a little above it. When practicable this antiseptic flushing should be done each time the catheter is passed. If this treatment is not efficacious, continuous catheterization becomes necessary. For this purpose a large soft rubber catheter, or a self-retaining one, is selected and the antiseptic solution introduced; if the catheter is properly introduced, the entire amount of the solution will return. Twice a day the urethra and bladder are thoroughly flushed with the antiseptic solution, the catheter being withdrawn far enough to allow the injected fluid to escape from the meatus, and then being pushed back into its former position.

The success of this treatment depends upon securing free and continuous drainage and this is incident to the permeability of the catheter and its retention in the proper position. When skillfully applied, it is one of the safest and most successful means of treating cystitis, which so frequently complicates obstruction from prostatic enlargement.

BOOK REVIEWS.

International Clinics—A Quarterly of Illustrated Clinical Lectures.—Edited by A. O. J. KELLY, A. M., M. D., Philadelphia—(*The J. B. Lippincott Co.*, 1903 *Vol. III, Thirteenth Series, Pp.* 305.)

This volume opens with a symposium on diseases of the Gall-Bladder and Gall-Ducts, in the course of which the subject is treated from the medical, surgical, etiological, semeiological and diagnostic standpoints. Musser opens the subject with a discussion on the medical aspects of the diseases of the Gall-Bladder and Gall-Ducts. R. D. Rudolph of Toronto discusses the causation, symptoms and diagnosis of gall-stone; Stockton, the diagnosis and medical treatment of cholelithiasis and cholecystitis; F. Parkes Weber of London, biliary cirrhosis of the liver, with and without cholelithiasis; Lejars of Paris, the value of and indications for surgical intervention; and the final article by John B. Deaver, is devoted to the surgical and post-operative treatment of chronic gall-stone disease. These articles are all eminently scientific and practical, and, as a whole, place the reader in possession of the most recent facts and opinions in connection with the general subject of Gall-Bladder and Gall-Duct diseases. Findlay of Aberdeen contributes a paper on the treatment of pneumonia, which is not only practical in its conclusions, but interesting as presenting a brief historical view of the therapeutic teachings in connection with this disease for the past fifty years.

Robin of Paris, in an article on gastric ulcer, makes a strong plea for active medical treatment in these cases, and indicates wherein the lives of the victims of this disease may be made less intolerable.

This volume is devoted somewhat largely to medical topics, but some sixty pages are devoted to surgical subjects as follows: Cocaine Anesthesia, with Illustrative Case-Operation for Varicocele, by J. A. Bodine; General Anesthesia, by John A. Lewis of Georgetown, Ky.; Asepsis and Antisepsis, by Lucas-Championière of Paris; Gastrostomy and Concussion of the Brain, by William L. Rodman; Intrascrotal Tumors, by William T. Belfield; and finally an article on The Modern Treatment of Varicose Veins, by C. E. Schwartz of Paris. (W. H. W.)

International Clinics—A Quarterly of Illustrated Clinical Lectures.— Edited by A. O. J. KELLY, A. M., M. D., Philadelphia—(*The J. B. Lippincott Co.*, 1903, *Vol. IV. Thirteenth Series, Pp.* 321.)

This volume completes the thirteenth series of this serial publication and the first under the present editorial management.

The list of subjects in this volume covers a wider field than some of the other volumes, and the authors of the various lectures are the representative men of both America and Europe.

The lecture by Musser on the treatment of Pneumonia is not only timely, but valuable.

Among the lectures on surgical subjects, all of which are profitable reading, may be specially mentioned that by Albarran of Paris, on the Radical Cure of Prostatic Hypertrophy, and that by William H. Battle and E. M. Corner of London on the Differential Diagnosis of Acute Abdominal Conditions which require Surgical Treatment.

There are five lectures devoted to Gynecology and Obstetrics, two to Neurology, one to Orthopedics, two to Ophthalmology, and one to Pathology.

This latter, by Joseph McFarland of Philadelphia, deals with the Present State of Our Knowledge of Immunity. This article covers twelve pages and in it will be found summed up in a brief and clear manner the present status of our knowledge of this important subject.

International Clinics needs no comment to recommend it to the reading portion of the medical profession. The work can be read with advantage and profit by all. (W. H. W.)

Lehrbuch der Klinischen Hydrotherapie—DR. MAX MATTHES, (University of Jena). *Textbook of Clinical Hydrotherapy. Second edition, Jena.*

Through the successful cures attained by a non-professional man, the ingenious Silesian peasant, Vincenz Priessnitz, the practical application of water in disease received a mighty impulse. His methods, crude and empirical as they were, had been accepted more or less by the medical profession.

To Prof. Wilhelm Winternitz of the University of Vienna, we owe the scientific foundation of modern hydrotherapy, he having investigated systematically the physiologic effects of water upon the system. Seldom has an individual such an influence upon the development of a branch of medicine as Winternitz exerted upon hydrotherapy.

All books upon hydrotherapy that have appeared in the last 25 years, were so much influenced by his views that they contained his theories without any alterations or criticisms. As examples I mention only three, edited in the last few years, which I think are relatively the best, *viz.* Principles and Practice of Hydrotherapy, by Simon Baruch, (New York), Lehrbuch der Hydrotherapie by Buxbaum (Vienna), and Rational Hydrotherapy by Kellogg.

Even if we acknowledge that Winternitz is a genius and that medical science owes him a great debt, we ought not forget that it is not to the best interest of the development of a science if the views of one man, however prominent he may be, are accepted without criticism. That is why the modern critical behavior of the profession was very useful towards the development of hydrotherapy.

Prof. Matthes, in his textbook, succeeds in revising very concisely the ideas of Winternitz. As a proof of its value, two editions have appeared within three years. This success is merited, for it is the best book on hydrotherapy extant, both for the practitioner and the student. Besides, he propounds new problems for investigation. Matthes is eminently qualified to write a work of this character, both by reason of his vast practical experience and by his scientific investigations. He utilizes 112 pages to discuss the fundamental principles of the physiologic action of water applications. There follows an excellent description of the technic of water application, including treatment with air, light and fango (60 pages). The principal and last part of the book (300 pages), treats of the subject of special hydrotherapy. The chapters on Hydrotherapy in Surgery, Ophthalmology, Gynecology and Obstetrics, are written respectively by Cammert, Hertel and Skutsch.

68 cuts, which are very descriptive, render the text more intelligible.

(A. N. B.)

CURRENT LITERATURE.

MEDICINE.

W. H. Washburn, M.D., Jos. Kahn, M.D., L. F. Jermain, M.D., A. W. Myers, M.D.

Treatment of Pneumonia.—DELANCEY ROCHESTER (*Medical News*, Feb. 13, 1904) includes a record of 210 cases treated by the plan advocated in the paper. There were 25 deaths, being a mortality rate of 11.4 per cent. These are the figures without exclusions. The patients ranged in age from 1 to 89 years; some were suffering from other diseases; some were the victims of alcoholic inebriety and delirious when brought under treatment; and some were almost moribund when admitted to treatment. Osler states in his Practice that "at the Mass. General Hospital, when all fatal cases over fifty years of age were omitted and those patients who were delicate, intemperate, or the subject of some complication were excluded, the death rate was a little over 10 per cent." If this rule of exclusion is applied in the records here presented the mortality rate would be 2.5 per cent. The plan of treatment is what might be called eliminative and is briefly summarized as follows:

1. The sustaining of the metabolic processes of the individual by the administration of easily digested or predigested foods in small quantities at stated intervals; the administration of large amounts of pure water for eliminative purposes; and the administration of oxygen gas by inhalation whenever the absorbing surface of the pulmonary mucosa is involved to such an extent as to interfere with proper metabolic oxygenation.

2. Elimination, (a) by the liver and bowel through the vigorous use of calomel and salts; (b) by the skin through sweats induced by external heat; (c) through withdrawal of blood when indicated by right heart distension.

3. Stimulation of heart by strychnine, alcohol or ammonium carbonate, and in suitable cases by the subcutaneous injection of normal salt solution.

4. The local treatment of the lung by leeching, wet cupping or dry cupping as indicated. (W. H. W.)

Improvements in Dietetics of Diabetics.—SIR JAMES SAWYER, (*British Med. Jour.*, Mar. 5, 1904) states that the researches of Mosse, published about two years ago, indicated that potatoes, far from being harmful, form a useful and beneficial food in glycosuria, and that they are capable of being substituted for ordinary wheaten bread. Mosse found that the daily ingestion of from 2 to 3 lbs. of potatoes brought about, in nineteen out of twenty cases of diabetes, speedy diminution of the glycosuria, quick relief of thirst, and general improvement in the patient, and all this in all forms of diabetes. Potash is contained in potatoes in much larger proportion than in wheaten bread, and Mossé attributes the superiority of potatoes in a diabetic dietary to the increased ingestion of potash. The author states that his own experience in practice confirms Mossé's conclusions.

In order to retain the salts, the potato should be cooked by steaming with its "skin" on, otherwise a large proportion of the potash and phosphoric acid will be lost.

By making a flour of potatoes cooked in this way mixed with bran, very excellent and palatable forms of bread and biscuits can be prepared. (A. W. M.)

The Dietetic Treatment of Arterio-Sclerosis.— THOMAS L. COLEY, (*Medical News*, Feb'y 13, 1904) discusses the general principle of dietetics, especially as influencing arterial pressure, and the relation subsisting between gout and arterio-sclerosis and morbid changes in the heart, kidneys, nervous system and gastro-intestinal tract. The relative value of various foodstuffs is also considered and practical deductions drawn, especially as regards both quality and quantity of food required by those in a normal state of health.

The dietetic restrictions which Coley deems necessary for patients suffering from arterio-sclerosis may be epitomized as follows:

(1.) The quantity of food should be greatly reduced, not more than one-half or two-thirds the general average for the body weight being required.

(2.) The quality of food is important. Proteid foods are to be reduced but not excluded. Meat should not be taken more than once daily and then in small quantity. It should be our effort to see that the patients obtain well cooked food, especially avoiding large amounts of fats or other substances difficult of digestion. Alcohol, tea, coffee, and cocoa, as well as tobacco are to be forbidden or used with extreme moderation. Excessive water drinking, or drinking large quantities of any fluid must be curtailed.

(3.) The regulation of meals is important. Breakfast should consist of fruit, a cereal with cream and perhaps an egg, poached or soft-boiled. There should be an interval of five or six hours between breakfast and dinner, and the heaviest meal should be taken in the middle of the day. It is not advisable to place too many restrictions upon what the patient shall have for his dinner. It may consist of soup, fish, meat and vegetables, but overfeeding is to be strenuously avoided. Between dinner and supper five or six hours should also elapse, and this meal must be light and consist, as breakfast, mainly of fruit and cereals.

In general, a comparatively dry diet is indicated and the patient should eat nothing between meals. Elimination must be kept at its maximum of efficiency and our hygienic regulations laid down in great detail and strictly enforced. (W. H. W.)

Physiological or Functional Albuminuria.—SAMUEL WEST (*Lancet*, Jan. 16, 1904) discusses the problem of physiological albuminuria which presents itself when a patient has albumin in the urine without any sign of organic disease, and considers its significance and importance. Accidental contamination from vaginal, uterine, urethral or bladder discharges, as well as such factors as cardiac disease, fevers, or depraved states of the blood, must first be eliminated. There then remains a group of cases in which no cause can be found to which the albuminuria can be referred; the patient is assumed to be healthy and the albuminuria is called physiological or functional. It does not follow, however, that because a cause has not been found no cause exists and therefore, a better expression would be albuminuria in the apparently healthy.

Statistics, showing the frequency of albuminuria in the apparently healthy, differ widely, but in a long series of observations made for the author it occurred in 42%. In about one-half of these the form of albumin was not serum-albumin, but nucleo-albumin, and that only in very minute trace. Of the 20 per cent. in which the albumin was serum-albumin in about one-half the cases the trace was so minute that it would have been overlooked in

ordinary examinations. The 10 per cent. remaining showed in most cases an amount extremely small.

Of healthy infants 10% present albuminuria and among the somewhat older patients of a children's hospital, it was found in 20% of the cases. Among young adults the percentage is in the neighborhood of twenty and rises regularly and rapidly after 25 years.

In these cases the albuminuria is often intermittent and varying in amount and is often influenced by such conditions as change of posture, as on getting up in the morning, exercise, diet, digestion, bathing, exposure to cold, etc.

The author calls attention to the frequency of granular kidney at all ages, even in early life, its insidious onset and long duration, and suggests its relationship to the condition under discussion.

He concludes thus:

1. Albuminuria may occur as a transitory symptom in persons who, except for this symptom, may be judged to be perfectly healthy, for they appear so at the time and remain so.

2. But it may also occur in persons who, though they appear at the time to be healthy, develop signs of disease subsequently.

3. It is difficult to distinguish at a given time between those who will remain well and those who will not.

4. It is difficult to exclude for certain, many of the pathological causes to which the albumin might be due. In other words, though there may be no proof that these causes are present, there is equally no proof that they are absent and in some cases the results show that they were not absent.

5. Speaking generally the larger the amount of albumin in the urine and the longer it persists, the greater is the probability of some permanent disease.

6. Continued observation of these cases shows that the so-called physiological albuminuria does very appreciably increase the risk of life, and that this risk grows rapidly with each year of age after thirty years.

As the result of the foregoing proposition, we are led to the general conclusion that functional albuminuria is never, strictly speaking, physiological at all, but that it is, on the contrary, always pathological, though not necessarily renal. (A. W. M.)

ORTHOPEDICS.

Geo. P. Barth, M.D., H. E. Dearholt, M.D.

Morton's Painful Disease of the Toes.—WALTER G. STERN (*Amer. Med.*, Feb. 6, 1904) gives the following graphic description of the symptoms of this affection: "The symptoms are a sudden feeling of uncomfortableness in the ball of the foot often accompanied by a snapping in the afflicted toe; then an intense, agonizing, burning, unendurable pain radiating from the fourth metatarsal head (it may be any other, but usually the fourth) through the thickness of the foot up upon the dorsum, followed often by faintness, cold sweats and a total incapacity for the time being of directing the mind to any other subject. The patient is usually seized with an insane desire to remove his shoes no matter where he may be; he seizes a stick, a cane, or um-

brella and jabs at the offending member so that he may get relief through the counter irritation * * * * At first the pain only comes on while the patient is wearing shoes, or is subjecting the foot to the various blows and shocks which invariably accompany locomotion, but after years the cramp may come on even at night or while the patient is walking bare-footed. The pain may vanish as suddenly as it began. Another pathognomonic feature of this disease is the insane desire to remove the shoe regardless of the surroundings whenever a paroxysm of pain comes on. This is often the way patients make the acquaintance of fellow sufferers."

He indorses the insole of Whitman in the treatment. He reports 11 cases. (H. E. D.)

The Significance of the Fatty Tissue in the Pathology of the Knee-joint.—[1]. HOFFA (*Deutsche Med. Wochenschr.* No. 10 and 11, 1904) gives a minute description of the fatty tissue of the normal knee-joint and compares with it the fibrous hyperplasia of this tissue, the Lipoma Arborescens of Johannes Müller and the Lipoma Solitaire of König. This differs from the normal, he says, in being larger and thicker, of the same color, or more frequently, of a reddish yellow tinge due to increased blood content, and firmer due to a permeating network of fibrous tissue.

He bases the diagnosis of the condition upon a history of trauma of the knee (fall or blow) followed by typical pressure symptoms, atrophy of the quadriceps and a typical doughy swelling immediately below and to both sides of the patella. The joint, and, in the majority of cases, motion is normal.

A differential diagnosis is made from internal derangement of the knee-joint, dislocation of a meniscus, and free bodies.

He then details the history of seven cases upon which he operated. (G. P. B.)

Observations on Hip Disease as Seen Among Hospital Out-Patients.—AUGUSTUS THORNDIKE (*Amer. Jour. of Orthopedic Surg.*, Nov. 1903) first calls attention to the conditions which modify the results obtained in out-patient work, such as poor care, bad hygienic surroundings, etc. 55 cases in all were examined.

Of 17 cases examined to determine the duration of the disease, 1 successfully left off apparatus after 18 months (a baby who had never walked), 1 at 4 years, 1 at 4½, 1 at 5½, 2 at 6½, 2 at 7, 1 at 7½, 2 at 9, 1 at 9½, 3 at 10 and 1 at 10½ years. Excepting the baby, the periods vary between 4 and 11 years (1 case still wearing convalescent splint). Trouble having arisen by too early removal of braces, a great deal of care is used in being absolutely certain of a cure before the splints are completely abandoned.

42 per cent. of the 55 cases had abscesses which indicates the severer type of disease.

In a series of 35 cases the average shortening was 1½ in., which included unusual cases (resection, etc.).

The author states that 20 degrees of permanent flexion does not impair gait; 35 cases out of 43 had 20 degrees or less.

Of 45 cases about ¼ were ankylosed, ¼ had motion to or beyond a right angle, the remainder ranged between these limits.

The usual line of treatment used was the Taylor long-traction splint, which treatment was modified to meet individual indications. (H. E. D.)

A Case of Spastic Paralysis Treated by Transposition of Hamstring Tendons.—BERNARD HARLOW, Buffalo, (*Amer. Jour. Orthopedic Surg.*, Feb., 1904) reports the case of a boy of eleven years with typical general congenital spastic paralysis. Athetosis did not exist at any time. Enfeeblement of mind was marked and general growth retarded. The hamstring group was chiefly involved having become greatly contractured. Electrical reaction was especially weak in quadriceps. The author instead of merely tenotomizing the contractured semi-tendinosus, semi-membranosus and gracilis, carried them forward and anchored them to the aponeurosis of the vastus internus. The tendon of the biceps was fastened to the vastus externus. The gastrocnemii were depended upon for flexion-power.

After eight weeks, massage and faradism were instituted and the patient was encouraged in attempts at locomotion. Ten weeks after operation, he was able to stand with a little assistance. Ten weeks later he was able to walk ¾ mile with aid of crutches. There has been marked improvement in the mental faculties, and a decrease in the nervous excitability. The author suggests that the central excitement may be, in part, a reflex of the continued muscle spasm. Photographic illustrations show great improvement, not alone in the correction of the deformity, but in the facial expression as well.

(H. E. D.)

Some Improvements in Hyperemia-Producing Apparatus.—AUGUST BIER (*Münch. Med. Wochenschr.*, Feb. 9, 1904) describes the suction apparatus which he is now using for the production of local hyperemia for the cure of joint diseases. The suction apparatus consists essentially of a large glass cylinder approximating the shape of the limb to which it is to be applied. Both ends are closed air-tight by means of a special arrangement of rubber occlusion bands, and a stop cock is fastened in one side. The instrument having been adjusted about the limb, the air is rarified to any desirable extent by a suction pump fastened to the stop cock. He also gives the indications and contra-indications for its use, and its mode of application for orthopedic purposes.

In the article he also describes the use of the hot air apparatus and the rubber bandage for the production of increased blood-supply to a joint.

(G. P. B.)

Regions of Predilection in Scoliotic Curvatures—SCHULTHESS (*Ztschr. f. orthopäd. Chir.*, X, 4, 1902) found in 1140 scoliotics the curvature situated as follows:

1. In the lower dorsal region to the right.
2. At the junction of the dorsal and lumbar regions, to the left.
3. In the upper dorsal and cervical regions, to the left.
4. In the lower lumbar region to the right. (G. P. B.)

Flatfoot and Scoliosis— LOEBEL (*Ztschr. f. orthopäd. Chir.*, X, 4, 1902) gives the result of an examination of 124 cases of scoliosis with the result that in 71.1% he found flatfoot present. The flatfoot is an accompaniment, not the cause of the scoliosis. (G. P. B.)

THE WISCONSIN
MEDICAL JOURNAL

MAY, 1904

THE SCOPE OF VAGINAL SECTION.

BY J. CLARENCE WEBSTER,

PROFESSOR OF OBSTETRICS AND GYNECOLOGY, RUSH MEDICAL COLLEGE AFFILIATED WITH THE UNIVERSITY OF CHICAGO; GYNECOLOGIST TO THE PRESBYTERIAN HOSPITAL, CHICAGO.

After the abandonment of the Freund operation for the removal of the carcinomatous uterus by the abdominal route (introduced in 1878) vaginal extirpation gradually grew in favor, and, ever since, has been widely practised. Previous to that period vaginal incision had practically been limited to cases of pelvic abscess. In 1857 Atlee removed a suppurating ovarian cyst through the posterior fornix. In 1870 Thomas described a method of removing an ovarian tumor *per vaginam,* but this operation was rarely attempted until within recent years. About 30 years ago Battey carried out vaginal öophorectomy for the induction of the menopause. In 1887 Gusserow advocated vaginal incision in certain cases of pelvic hematocele. Since that time many other intra-pelvic conditions have been treated by operative measures carried out through the vaginal opening, and, at present, a number of enthusiastic operators advocate this route to the exclusion of the abdominal incision in a large percentage of cases.

In favor of colpotomy it is urged that there is less shock, less post-operative disturbance and less danger to life. An abdominal scar is also avoided. As regards a limited percentage of cases some of these claims may undoubtedly be sustained.

If an operation may be performed equally safely and satisfactorily by either route, the vaginal should be selected, but when this route is recommended for routine work in preference to the abdominal incision too strong a protest cannot be urged.

The ideal which some operators set before them—of merely removing some pathologic condition—is a very bad one and is out of harmony with the trend of the best work of recent years. It is equally important that removal shall be accompanied by procedures calculated to diminish the risk of after-troubles. Thus, in removing adherent structures, *e.g.,* pus tubes, it is necessary that freshly rawed peritoneal

surfaces should be covered as much as possible. This protective work cannot be carried out satisfactorily save by the abdominal route. The sigmoid flexure is very often adherent to the left diseased appendages and broad ligament. After its separation the adherent area may very often be stitched to the side wall of the pelvis so that it may not again become attached to viscera; this procedure is only possible by the abdominal route.

In dealing with the appendages of one side it is often found that the opposite tube and ovary are prolapsed and somewhat adherent so that it is advisable to separate the latter, cauterizing or covering the rawed areas, and stitching the infundibulo-pelvic ligament to the side wall of the pelvis at the level of the brim so as to suspend the prolapsed structures; it is evident that such work is impossible by the vaginal route. In a considerable number of cases of pelvic disease, the vermiform appendix is also affected. Very frequently this complication is found during an abdominal operation, when it has not been suspected by the operator; occasionally, the appendix is intimately blended with an infected tube or ovary. Whenever the appendix is affected it is always best to remove it. If, therefore, an operator adopts the vaginal route extensively, it is certain that he will leave a diseased appendix in his patients in a considerable number of instances. Moreover, in removing diseased right appendages, he occasionally runs the risk of tearing the appendix. This accident as well as the tearing or cutting away of a portion of adherent intestine has happened in the practice of more than one enthusiastic colpotomist known to the author. One great advantage possessed by the operator who performs an abdominal section is that he is able to explore the entire peritoneal cavity and determine the condition of the various tissues and organs. Very frequently valuable information is acquired in reference to important structures, *e. g.*, calculus in the kidney or gall bladder, malformations, adhesions, etc. By the vaginal incision no such knowledge can be gained. The advantage claimed for colpotomy, *viz.*, that it has no abdominal scar, is too trivial for consideration, though it may appeal to the asthetic proprieties of the female sex.

The statement made as to the diminished mortality of colpotomy operations is entirely misleading. Indeed, it is almost impossible to establish a comparison with the abdominal method which is at all exact.

Operations in uncomplicated cases which may be performed as easily by one route as by the other should have, in the hands of an expert operator, an equally low mortality. Regarding complicated cases, there can be no doubt as to the greater safety of the abdominal method, all other conditions being similar.

In considering the question of choice between the abdominal and vaginal routes the size of the vagina must always be an important consideration. In the nulliparous or virgin woman there is very little scope for the performance of operations through the vaginal incision.

CONDITIONS IN WHICH THE VAGINAL ROUTE MAY BE SELECTED.

1. Myoma uteri.—Removal of small myomata may sometimes be carried out. Extirpation of the entire uterus, by morcellation, may also be safely performed when the swelling caused by the tumors is not more than five inches in diameter, when the vagina is roomy, when the tumor is partly or wholly in the pelvic cavity, and not extensively adherent.

2. Malignant disease of the uterus.—Extirpation of the uterus by the vaginal route is widely practised. In the hope of removing parametric tissue and lymphatic glands, there is a tendency to employ the abdominal operation to a greater extent. It is yet doubtful whether the latter procedure justifies the claims of its advocates.

3. Retroversion of the uterus.—Various procedures may be performed for the repair of this condition, *e. g.*, vaginal fixation, shortening of the round ligaments; but in the great majority of cases operations which involve opening the peritoneal cavity are more satisfactorily performed through an abdominal incision. The complications which are so often found with retroversion are also more easily dealt with by the latter method.

4. Inversion of the uterus.—Where operation is necessary in this condition it may usually be carried out by the vaginal route.

5. Intrapelvic adhesions.—Various operators have recommended the vaginal route for the breaking up of pelvic adhesions. In the author's experience this is an unsatisfactory proceeding. Rawed areas are formed, which are certain to give rise to more adhesions. This condition can only be satisfactorily dealt with through an abdominal opening, which allows measures to be undertaken for the covering of rawed areas.

6. Diseased ovaries.—In some cases these structures may be removed through a vaginal opening. Resection may also be carried out in some cases.

Ovarian cysts may sometimes be removed, but the cases should be removed with great care. Favorable ones are those which are small, movable, thin-walled and non-adherent. Unfavorable ones are those which are very large, malignant, adherent, containing many cysts, those which are intra-ligamentous or in which torsion of the pedicle has occurred.

7. Tubal disease.—Certain tubal enlargements may be removed by colpotomy, but in cases in which adhesions are numerous and complicated, the procedure may be very unsatisfactory and risky.

8. Pelvic abscess.—Incision followed by drainage is very frequently indicated, whether the products of infection are tubal, ovarian, peritonitic or cellulitic. The incision should only be made when the swelling is easily palpable through the posterior fornix.

9. Ectopic gestation.—In some cases the pregnant tube in the early weeks may be removed by vaginal section, though most operators choose the abdominal route because there is much less risk of rupturing the tube and causing hemorrhage.

After rupture of the tube and the formation of the localized pelvic hematocele vaginal incision followed by gauze drainage may be very satisfactory sometimes; however, on account of recurrent hemorrhage it is necessary to open the abdomen afterward in order to control bleeding.

10. Extensive infection of the genitalia.—In cases of infection involving the uterus and adnexa, in which total extirpation is indicated, the vaginal route is greatly favored by several operators. The author prefers the abdominal incision in the great majority of cases because through it complicating adhesions can be more satisfactorily removed and raw areas covered.

11. In cases complicated by some distant lesion, *e.g.*, heart, lung, kidney disease, etc., it is recommended that the vaginal route be employed in order to lessen the shock to the patient. In such conditions, by careful preparation of the patient, by rapidity in operating, by using local anesthesia and diminishing the general anesthesia, the author has obtained as good results by the abdominal as by the vaginal route.

12. Exploration.—Incision of the vagina for digital exploration of the pelvis may sometimes be carried out, though its scope of usefulness must be regarded as very limited.

Various forms of incision are employed, the patient in all cases being in the lithotomy position, and the vagina being opened as much as possible by means of retractors.

In cases in which great difficulties or complications arise after the vaginal operation has been commenced, it may be necessary to complete the procedure through an abdominal incision.

1. Posterior colpotomy.—The cervix is drawn downward and forward as much as possible and a transverse or T-shaped incision, an inch or more in length, made through the posterior fornix, so as to open the lowermost position of the pouch of Douglas. This method is

much less employed than anterior colpotomy. It is chiefly used in exploring the pouch of Douglas in breaking up posterior adhesions and in opening fluid collections in the pelvis; very rarely for other purposes.

2. Anterior colpotomy is much more frequently employed for operations on the uterus and appendages. Various forms of incision have been employed.

a. Transverse.—Dührssen and others have recommended a transverse incision in the anterior fornix below the junction of the bladder and cervix, an inch or more in length. The cervix being pulled downward and backward, the bladder is stripped from the cervix and anterior vaginal wall through the incision and pushed upward. The utero-vesical pouch of peritoneum is then opened.

b. Mesial.—Orthmann and others make a mesial incision through the anterior vaginal wall extending from the junction of the latter with the cervix an inch and a half or more.

c. T-shaped incision.—Mackenrodt makes a transverse incision like Dührssen's and another mesial one at right angles for an inch and a half or more through the anterior vaginal wall.

d. Webster's method.—The author makes a circular incision around the cervix just below the attachment of the vaginal wall. This is joined by a mesial incision an inch and a half or more in length, dividing the anterior vaginal wall. The cervix being well pulled down, the wall of the vaginal vault is stripped upward until the anterior pouch is reached. The anterior vaginal wall is also stripped somewhat from the base of the bladder. The utero-vesical pouch is then opened.

The advantages of this method over the others are that the uterus can be pulled down to a greater extent and that more room is obtained for intra-pelvic manipulations. Sometimes the latter may be facilitated if an additional transverse incision be made through the pouch of Douglas. Frequently when the uterus is considerably enlarged from chronic metritis it is advisable to ligature one or both uterine arteries (easily exposed in the raw surface already made). When the enlarged uterus cannot be well brought down its descent may be assisted if the base of one or both broad ligaments be divided internal to the ligatures.

At the end of the operative procedures, the uterus is pushed into place, the peritoneum closed and the original vaginal incisions closed with catgut.

When amputation of the cervix is called for in addition to the colpotomy this procedure is carried out after the closure of the peritoneum, and the vaginal flaps are then brought over the stump of the

cervix and stitched to the margin of the cervical canal. When, however, the size of the uterus is a hindrance to its descent, amputation should be carried out immediately after the stripping up of the vaginal wall.

Less of the vagina is then occupied by the organ when the body is pulled down and greater access to the pelvis may be obtained. The stump of the cervix in such a case is covered by the vaginal flap at the end of the operation.

When anterior colporrhaphy is required the necessary flap is removed when the first incision is made. The closure of the raw surface thus produced is brought about by means of continuous catgut suture at the end of the entire operative procedure.

SYPHILIS AS A CAUSE OF PSYCHOSES.*

BY RICHARD DEWEY, A. M., M. D.
WAUWATOSA, WIS.

I will first inquire in what sense can syphilis be considered a cause of insanity? If we remember that insanity only develops in those who are constitutionally predisposed and that of the thousands who acquire syphilis only an insignificant fraction become insane, the question will more properly take this form: Under what circumstances does syphilis become a determining factor? Syphilis may become a cause of insanity where the way has been paved by other causes, or it may itself pave the way for the development of insanity, but in each case a predisposition must exist.

Those who have most thoroughly studied insanity know that it is seldom possible to speak of a single cause, but every case is the result of several influences acting in conjunction.

The article by Savage in "Psychological Medicine" (1) states, "There is no such thing as syphilitic insanity." It is generally agreed that syphilis does not attack nerve tissue and the injury it does the brain is secondary, being wrought through disease of blood vessels, lymphatics, connective tissue or membranes. It is through mechanical and nutritive effects and not directly that injury is done to nerve tissue by syphilis; though to this must be added the toxic or chemical irritation which in early stages of syphilis produces a functional psychosis in some cases. We must recognize the fact, however, that a neurotic constitution is a prerequisite even where a syphilitic subject develops insanity. The universal truth that a neurotic constitution

*Read before the Milwaukee Medical Society, April 12, 1904.

and heredity are essential preliminaries to the genesis of insanity should be better appreciated by the profession at large. This truth holds good even where insanity follows a traumatic injury. The same blow on the head in each of two persons, one of whom has hereditary predisposition and the other not, will determine insanity only in the former case. It has also been noted by many writers that in the cases where syphilis attacks the nervous system it produces much less obvious mischief in other tissues, and in many cases the initial lesion has been forgotten or thought to have produced no secondary effects until paresis or other organic psychosis appears; the skin and mucous membranes in these cases may have almost wholly escaped injury.

Illustrating this point, I will mention a case examined by me not long ago—of a clergyman, aged 43, member of a religious brotherhood, who came to me with paresis plainly stamped upon his face, his speech, his gait, his pupils and his mental operations, which—the latter—were marked by delusions of depressed and persecutory form. I examined him carefully without discovering a single somatic sign of syphilis. Here, I thought, is a case which refutes the claim that paresis is universally of syphilitic origin; this man of devout life in the seclusion of the chapter-house has surely never been exposed to venereal infection. I should perhaps have omitted the direct question, but before I could ask it the patient, with tremulous lips, gave me an authentic and precise statement of an infection with hard chancre which had occurred at the age of 23—20 years before, and prior to his taking holy orders.

Kraepelin, (2) speaking of syphilis as a cause of brain disease, remarks: "Many observers report cases in which the infection brings out hysterical or neurasthenic manifestations." He is ready to believe that this may be the case, but adds that there are also cases in which the first and lightest symptoms of progressive paralysis are of this nature. He states further, "The significance of syphilis is in the important changes it induces in the central nervous system." On this account "syphilitic mental trouble is accompanied by a great variety of nervous symptoms, whose unusual character is often the first thing to permit the recognition of the disease, since the mental symptoms are too indefinite to admit of differentiation from other non-syphilitic forms."

With great diffidence I would remark here that Kraepelin in this view adopts an uncertain method of reasoning, for with all the difficulties at present attending differential diagnosis of the various forms of insanity, we are hardly warranted in basing a diagnosis upon a seeming *lack* of type.

Kraepelin quotes with approval Heubner's view that three forms of syphilitic disease connected with three different pathological changes are recognizable. The first form, often depending upon gummatous

neoplasm in the cortex, shows at first moderate irritability in the temper and disposition, increasing to either depression or exalted excitability. Later, impairment of judgment, weakness of memory, retarded mental action, superficial and capricious moods, aphasic disorders and epileptoid attacks which generally usher in the fully developed psychosis.

In the second group we are concerned with a disease of the basal arteries, a narrowing or occlusion, and the disease shows apoplectiform symptoms with simple mental weakness and permanent paralysis, a sign of plugged end arteries in the basal ganglia. Third—The same event, on the other hand, in the cortex—on account of the collateral compensation here—possibly produces only peculiar sudden conditions of half-consciousness with inclination to impulsive mildly insane actions. "If these forms are only with little certainty to be differentiated from the large group of paralytic psychoses it is nevertheless certain that at least the great mass of these last likewise stand in near relation to syphilis. Freely, we are unable to-day to make a more accurate representation of this relation. Only so much is certain, that the paralysis of syphilitic infection generally follows after a series of years: that it is not favorably influenced by specific treatment, much less cured, and that it is therefore not to be taken as syphilitic brain disease in the narrower sense."

Kraepelin refers to Moebius' "metasyphilis" and admits that in paresis we have not so much to do with a localized brain syphilis as with a deeply seated general disturbance in the whole body. He cites the frequent conjunction of kidney and heart disease and atheroma of aorta found in paretics, and thinks the evidence favors the view of a general implication of the blood vessels.

In tentatively classifying the insanities associated with syphilis, we may divide them into—first, functional; second, organic.

The functional cases may be subdivided into the hypochondriacal, the syphilophobiac, the maniacal, the melancholy or demented, and cases of the delirium generated in rare instances by the syphilitic toxin; also cases of the paranoiac type with disordered sensory action, where delusions or hallucinations predominate, more or less systematized, and with mental clearness outside their sphere.

1st. Functional Syphilitic Psychoses.

Among the functional cases belong those in which the *idea* of syphilis is more important or produces more effect than the syphilis itself, even to such extent that a *non*-syphilitic person, possessed with the idea he is infected, is plunged into despair resulting in mania or even suicide from overpowering fear or delusion. This mental infec-

tion cannot be said to be caused by syphilis but is worthy of mention as of practical importance to the alienist.

Again, where syphilis actually exists the fear of it may have more serious results than the disease itself. I will recite here some remarks and cases recorded by Alfred Fournier in a recent paper on "Suicide in Syphilis" (3). Fournier makes four groups of cases of this kind. The first group only concerns us and comprises cases where the suicide is the result of mental disease caused by syphilis. It is worthy of note in passing that Fournier finds three groups in which the suicide is a *sane* act, as suicide is so generally but erroneously considered in itself an evidence of insanity.

Of this first group Fournier says it comprises cases of specific encephalopathy—a cerebral gumma, a psychosis, a general paralysis. He states, "In certain forms of specific encephalopathy the suicide appears as a remarkably early manifestation." He also gives two cases of later suicide—one a man syphilitic for 12 years but apparently in the best of health and unusually fortunate in his worldly affairs, who became morose and despondent, seemed to despair of the future for himself and family without apparent reason, and, growing more and more desperate, finally in insanely delusional condition he blew out his brains. In a letter left behind he stated he could not survive the torture which was gnawing at his heart on account of all his misfortunes. A second case—parallel to the above—Fournier gives of a physician, 8 years syphilitic, who apparently from no other reason became hypochondriacal, melancholy and in a few weeks committed suicide. In the first of these cases there was a severe neurotic heredity, but not in the second.

Fournier also notes a similar condition in children of syphilitic parents, citing a fine boy of 15 who suffered an arrest of development, became hypochondriacal, silent, peculiar and depressed and attempted suicide several times, finally succeeding in his 20th year. The same was true of other cases known to Fournier—one a boy of 17 whose parents as well as himself were syphilitic, who stabbed himself as a result of a simple discussion with a friend.

Dagonet (4) says that syphilis by its very nature, more than any other malady, is the cause of chagrin and of every sort of unceasing regret. "There are few asylums that do not present remarkable examples of that form of hypochondria and agitated melancholia that has been called with great justice "syphilophobia." He speaks of Ricord's citation of the curious disposition to examine all details and circumstances and scrutinize the excretions—a disposition saddening the existence and producing a strain capable of inducing insanity.

Another functional syphilitic insanity is that which is known to appear with the eruption of secondary lesions, apparently from cortical irritation conjoined with the fear and horror attending the eruptions and ulcers and apprehension of worse disasters yet to come. This is usually an acute maniacal attack and runs a favorable course as far as the attack itself is concerned, but must unfortunately often be regarded as a forerunner of other psychic troubles since it shows a predisposition in that direction.

Of those cases in which the predominant type is dementia and dullness, stupor and confusion of mind, it is in some cases difficult to say whether we have a purely functional case. A majority of these will be found to be associated with structural changes though there are some in which the absence of motor or sensory focal symptoms and a subsequent complete recovery under specific treatment show that no destructive lesion existed.

Another functional psychosis is that found occasionally in conjunction with the disfigurement or deformity produced by syphilis. Patients with unsightly eruptions, saddle noses, destructive eye disease, etc., imagine often they are subjects of ridicule or persecution or that a disgusting odor attends them and makes them objects of aversion. Such patients are at times dangerous as a result of their suspicion.

The limits of time forbid further description of this class of cases.

2d. Organic Syphilitic Psychoses.

Now, considering organic psychoses, it is to be remarked that there are many cases in which with our present knowledge, only provisional diagnosis can be made—where only functional or bio-chemical changes can be discerned yet structural disease may be present. Structural syphilitic disease of the brain almost always, however, causes a marked change of mental function, yet of a different character. The syphilitic hemiplegic may be simply emotionally weakened. The hypochondriacal element is marked in many cases of organic dementia and paresis. Loss of memory, confusion and stupor, delusions and hallucinations are often associated with the motor and sensory changes that indicate organic syphilitic disease, as well as the various degrees of impairment of consciousness.

Taking up the structural or organic forms of syphilitic brain disease producing insanity, we begin with the earliest period of life and with congenital conditions. While technically genetous idiocy and imbecility are not insanity, yet they properly fall within the field embraced in this paper. As to idiocy or imbecility caused by syphilis it is generally agreed this is rare, not exceeding 2 per cent. of the cases

as found in asylums and schools for the feeble minded, but syphilitic idiots and imbeciles are found and are classified by Savage as (a) moral, (b) intellectual, and (c) paralytic or epileptic idiots.

Forbes (5) in a study of 44 cases of hereditary syphilis as to the "Influence on the Nervous System," gives among others the following conclusions:

There is a later or tertiary stage of hereditary syphilis bearing a close resemblance to the tertiary stage of acquired syphilis. * * *

He further states that the affections of the nervous system are rare but cerebral cases are more common than spinal; that congenital idiocy is rare; that the mind and intellect are well developed in a majority of cases prior to the onset of cerebral symptoms. Cerebral symptoms, such as headache, mental failure and epilepsy, usually appear between 5 and 10 years of age; that mental deterioration usually precedes paralytic symptoms in the later stages; that epilepsy is in some cases a premonitory symptom of cerebral disease.

Other conclusions of Forbes are that general paralysis occurs in young people between the age of 8 and 20 almost certainly as a result of hereditary syphilis; that rarely cases of adult general paralysis may be due to the same cause where no history of acquired syphilis is to be obtained. Extravagant delusions are not present in the early stages of juvenile general paralysis, but a state of dementia is far more common. He also states that the disease usually runs a progressive course and terminates in 3 or 4 years.

Next in order to psychoses of congenital syphilis come those incident to *syphilis hereditaria tarda*. It is now generally agreed that syphilis may appear late in childhood: in the adolescent period or even later, which has not been preceded by any discoverable specific signs or symptoms or at least if such were evident in infancy, they have disappeared. This fact has an important bearing upon the cases reported with increasing frequency of paresis at or near the years of puberty, or later up to the 25th year. Even in rare instances hereditary syphilis may appear after the 40th year. This subject has been recently ably discussed by Abt (6).

Some of the points brought out by Abt are the following: "The multiplying cases of organic disease of the nervous system in late hereditary syphilis with some of the following characteristics: Persistent headache with nocturnal exacerbations, meningitis and endarteritis, infantile (juvenile) tabes and progressive paralysis, mental deficiency and backwardness such that subjects of 20-25 years show the characteristics of children of 10 or 12; cerebral gummata are exceedingly uncommon."

The relation of hereditary syphilis to juvenile paresis and to paranoia has only begun to be studied. It seems highly probable, however, that degenerative defects and weaknesses of brain tissue due to syphilitic disease have much to do with the incapability of normal de-

velopment which we call "instability or neurotic heredity," and that all forms of degenerative insanity may have as their background inherited syphilis.

Turning now to *acquired syphilis* as a cause of organic brain disease leading to insanity, we recognize constitutional syphilis not as a frequent but as a very important cause of brain lesion and degeneration. Considered with reference to paresis, the only question now undecided is whether there is any case that is *not* caused by syphilis. One striking fact that has arrested attention is the frequency with which paresis has occurred in husband and wife with certainty or strong probability of the infection being contracted by one from the other. I reported in this Society 10 years ago three such cases that I had then observed, and I have since encountered two more—or rather one of conjugal paresis and one of organic syphilitic dementia in the wife and paresis in the husband. In this latter case the wife under my care 9 years ago was in a state of exhaustion and low delirium from syphilitic dyscrasia for many weeks, later for a year confused, stuporous and demented with ill-defined delusions. Under specific treatment gradual improvement occurred. She had mucous patches in the mouth (and infection was accidentally conveyed to the nurse who cared for her). There were unmistakable signs of syphilis which the husband himself admitted he had communicated to her unwittingly. He himself later developed paresis, which rapidly reached a fatal termination, the wife meantime improving and to-day—aside from very slight mental weakening—there is nothing abnormal in her condition.

It is not necessary here to enter into the familiar mental symptoms of brain tumor and arteritis which of course are similar, if not identical, with those of tumor and arterio-sclerosis from other causes.

Griesinger (7) says, "Constitutional syphilis does not easily lead to insanity except through positive malnutrition of the cranium, the brain and its membranes, but in these respects must be seriously considered. Periostitis with slight inflammation of dura and the soft membranes, severe chronic meningitis and encephalitis are the processes. To confirm the diagnosis of syphilis, former nocturnal headaches, disease of nasal bones, tophi of the cranium, etc., are to be sought. Griesinger insists that mental disorder of syphilis has always more or less sharply localized typical brain lesion as its foundation. We do not know the conditions developing chemical products which cause secondary degeneration of certain tracts, but must discriminate between these and the immediate results of bacterial infection. Gumma belongs to the first, tabes and paralysis to the second.

I will close by citing from a paper I published in 1901 (8), the characters noted in review of case records then accessible.

In reviewing my records of six years, covering over 1,200 cases of all forms of nervous and mental disease, I found among these 45 cases of well-substantiated, constitutional syphilis. Doubtless an equal or greater number which I rejected for want of definite knowledge might have been included without serious error, but considering only these 45 cases, they were made up as follows: 17 were diagnosed as paresis; 12 as syphilitic brain disease with symptoms of organic lesion; 7 were cases of psychoses with marked delusional characteristics and without focal symptoms of brain syphilis, the mental symptoms taking the form of delirium, stupor, extremes of exaltation and depression and mild dementia, 4 having ophthalmoplegia and optic neuritis; 4 were cases of hypochondriacal melancholia and of these 3 temporarily improved, the other was a morphine case; 2 were cases of tabes with emotional weakening as the only mental failure, and there was one case each of slight dementia, melancholia and dementia paralytica of the senile form. The type of mental disorder in the 17 cases of paresis was expansive in all except 2. Marked confusional condition was present in the 2 depressed cases, and in 9 of the expansive cases confusion was also a very prominent feature.

These cases were gone over and tabulated with reference to the following points: The type of hallucinations and delusions, where present; the cranial nerve symptoms; the evidence in each case of syphilis; the habits and occupation; the outcome as to the history of marked stress as a factor producing the mental disease and the time of the infection prior to appearance of psychopathic symptoms.

I found, however, that these tables possessed but little significance, partly because no useful deductions could be made from such small numbers and partly because the exclusion of so large a number of probable cases for want of a positive diagnosis seemed to me in a measure to vitiate the result.

REFERENCES.

1. Dictionary of Psychological Medicine, p. 1253.
2. Psychiatrie, Dr. Emil Kraepelin, Vol. 1, p. 37 *et seq.*
3. Le Suicide dans la Syphilis, Alfred Fournier, La Presse Med., Paris, 1903, p. 381.
4. Dagonet. Traite des Maladies Mentalis, p. 226.
5. James G. Forbes, M. A., M. D., St. Barth. Hosp. Reports, 1902, Vol. 38, p. 32 *et seq.*
6. Syphilis Hereditaria Tarda, Isaac A. Abt, M. D., WISCONSIN MEDICAL JOURNAL, Feb., 1904, p. 539.
7. Path. & Ther. der Psych., Griesinger, 5th ed., p. 300.
8. The Psychoses in Cerebral Syphilis, Journal Am. Med. Ass'n, Oct. 26, 1901..

NEURASTHENIA.*

BY H. H. ALBERS, M. D.,
ALLENTON, WIS.

There exists a large family of nervous disorders which torture an ever-increasing class of individuals—especially among brain-workers and people who lead an indoor life, but in regard to which but very little is said in the lecture room, text-books or other works on medicine. They come under the observation of every practising physician, but are so subtle, so difficult of analysis, so illusory that in his endeavor to explain such maladies to his patient or to his brother practitioner, the physician readily falls into the error of treating them as of an organic or objective origin, rather than as of a subjective character.

Our sense organs will aid us but little in our diagnosis of the symptoms, not even if supplemented by the more modern appliances, such as the stethoscope, ophthalmoscope, microscope or the various other "scopes."

Thus: exhaustion of the brain (cerebrasthenia) is passed off as cerebral anemia, exhaustion of the spinal cord (myelasthenia) or spinal irritation, as spinal congestion or spondylitis, sick headache as gastric disorder, inebriety as drunkenness, etc.

Although these neuroses are not directly fatal, yet the amount of suffering which they cause is enormous, and there is danger that any one who does not feel them will give them undue notice.

All these disorders have a common pathology, a common history, and in a general way a common prognosis, and may, therefore, be brought under the one head of neurasthenia.

Literally interpreted, neurasthenia means lack of nerve strength and is most vividly expressed in the parlance of the up-to-date American as "nerve fag."

Neurasthenia attacks or may attack all functions and organs and is for many reasons difficult to diagnose. One reason for this is that both the physician and the patient have, after a short conversation, satisfied themselves that a correct diagnosis has been made and that a cure would be wrought by a carelessly prepared prescription. As I have stated before, many of the symptoms do not appeal directly to the senses and can only be learned by close cross-questioning of the patient and friends, and then not at one visit. Another reason is that many people who suffer from this malady are unable to express their true feeling and do not comprehend the purport or importance

*Read before the Washington County Medical Society, Hartford, March 30, 1904.

of your questions. Others will forget many of the symptoms which they may have suffered while their sickness continued. (It is one of the blessed orderings of nature that the ills which man suffers pass into forgetfulness.) They will often contradict themselves and very unintentionally mislead you. We must, therefore, study them very carefully, get a full and complete knowledge of all their symptoms and of the family history, especially as to whether any of this class of maladies has existed among the relatives. It has been said that the intellect is the worst enemy of the emotion, and getting these patients interested in their own case will improve them rather than frighten them, as might seem would be the case by inquiring so minutely into their condition.

The symptoms of neurasthenia are hard to classify. We may begin with the head and go down. Tenderness of the scalp may first be mentioned. This may exist only in spots or be general and felt especially on superficial pressure. Simply touching the hair may cause pain. A sudden jar, emotional disturbance, or mental labor may bring on this symptom. The commonly known sick headache should be classed among the symptoms of nervous exhaustion. Lightness of the head is also a common complaint and the "I don't know how I feel," another symptom. Changed expressions of the eyes are often seen, such as dilated pupils, unequal pupils and congestion of the conjunctivae, which conditions come and go like all other symptoms of this disorder. Noises in the tears (tinnitus aurium) and thumping sounds or explosions are frequent. Also subjective odors exist. I have in mind now a patient who had a very bad case of neurasthenia, who smelt smoke continually for about a week and then switched over to smelling something putrid. Similarly with the sense of taste—continually tasting something which the patient has not in his or her mouth. Others will taste things wrong and still others will have a loss of taste. All these symptoms are only temporary or fleeting when simply due to functional disturbance of the nerves.

There is also a neurasthenic voice which is marked by softness, faintness and want of clearness, and resembles that of a convalescent from a long-continued fever. Emerson has said that "the voice is the true index to the soul." As an example of this we may mention the coarse and low-pitched voice of women who lead a dissolute life. Among other symptoms we may mention irritability of mind and also inability to fix the mind. One of the most aggravating symptoms is the hopelessness which these unfortunates suffer. When a patient is dying in the last stages of consumption or cancer, he rarely gives up hope. In neurasthenia the reverse is true. The patient seems to feel

that he has a lack of nerve strength to ward off death.. During our half-awake moments at night, the slightest noise will cause our hearts to beat violently simply because we seem to realize our defenseless condition. These patients seem to carry that feeling continually for periods of time. Out of this feeling also grows the great variety of morbid fears from which some of the patients suffer and which the late Professor Beard of New York has very learnedly classified and tabulated thus:

Astrophobia, fear of lightning.
Topophobia, fear of places. A generic term—Agarophobia, fear of open places. Claustrophobia, fear of narrow places.
Anthropophobia, fear of man—a generic term—including fear of society, and Gynophobia—fear of women.
Monophobia, fear of being alone.
Pathophobia, fear of disease.
Phobophobia, fear of being afraid.
Pantaphobia, fear of everything.
Mysophobia, fear of contamination.

We must also mention insomnia as one of the manifestations of neurasthenia. Some will fall asleep immediately upon retiring, but will soon awake and sleep no more during the night. Others will roll and toss about for hours before the much desired slumber overtakes them and they will then sleep soundly until morning. In others the sleep is broken. A young clergyman told me some time ago, in all sincerity, that he had not slept one wink for over a month. Such patients do sleep for short periods of time, though they are not conscious of it. In connection with insomnia I will mention the spasms that sometimes occur at the moment of going to sleep. Either an arm, a leg or the whole body will be thus affected. I once witnessed these convulsive movements which were almost violent enough to throw the patient out of bed and would, of course, repeatedly bring him to complete wakefulness. These spasms have been explained to be "the effect and sign of congestion in the exhausted nerve centers and occur while passing out of the waking into the sleeping condition, because the inhibitory or controlling power of the waking state is removed." Nervous dyspepsia, if there be such a thing, may be included in this category of symptoms, but I believe that dyspepsia itself is the forerunner of, and is a strong factor in producing many of the aforementioned disorders. We also come across cases in which there is extreme tenderness of the spine, so marked that it overshadows all other symptoms and has been set aside as a disease in itself—"spinal irritation"—but this is really but another symptom of the disease which we have under consideration. Spinal irritation, as you know,

is most frequently met with in women. The tender spots which are found along the back, in the neck, between the shoulders, in the lumbar region or at the tip of the coccyx, are familiar to all physicians. I have discovered them during the menstrual period only to disappear after menstruation had ceased. I have a man now under my care who is very much worried over an exceedingly tender spot over the xiphoid cartilage, and his general make-up leads me to believe that his trouble is neurasthenic in character. One of the most frequent complaints in neurasthenics is heaviness of the limbs and loins. This is usually accompanied by vague pains and may be easily confounded with a common cold or with rheumatism. Patients afflicted thus dread the climbing and descending of stairs; they also complain of the heaviness of the shoes—be they ever so light.

Shooting pains, simulating those of ataxy, are a very common symptom. The stress that physicians in the past have laid upon shooting pains as a premonitory symptom of ataxy has lead many astray in the diagnosis. While yet a student I knew a physician who commenced to be troubled with these shooting pains. He consulted a number of specialists, none of whom gave him a definite answer. He was in a constant state of worry. This physician, owing to overwork, is not yet in good health and still has the shooting pains, but no ataxy has developed. This, I suppose, is but one of the many instances where physicians are sufferers from this neurasthenic symptom, causing them untold worries that continually fan the flame. Another annoying, but common symptom, is peripheral numbness. This numbness is, as a rule, definitely localized. Hyperasthesia, either local or general, is common. These patients are sometimes so hyperasthetic that lying on the softest, downy couch will cause them pain and they continually move about, endeavoring to find a softer place. Many other symptoms might be mentioned, such as ticklishness, nervous chills, flashes of heat, cold feet and hands, gaping and yawning, tenderness of the gums and teeth, etc.

The objection may be brought that the disease is presented in too many shapes and phases. The how and the why of the working of our nervous system is unknown to us and the study of this had best, for the present at least, be left to the psychologist.

We know that any affection of a nerve center, either objective or subjective, controlling a large tract of the nervous system, may produce a multitude of symptoms. It is my aim to deduce neurasthenia from our knowledge of the brain, the spinal cord, the nerves and the sympathetic system, and present it only as the symptoms of it come under our observation.

There is an old belief that one disease will cure another, that the curing of one disease will bring on another. For this reason women

will sometimes not allow us to cure their varicose ulcers. We do know that pain in the head will often relieve pain in the stomach; that pelvic pain will disappear when visceral disorders occur; that blistering will relieve deep-seated pains, etc. Thus it may be that the symptoms of neurasthenia may follow each other, relieve each other or even ward off structural diseases. I have hinted that the physician should not be too apprehensive of the existence of organic diseases when some of the above-named symptoms present themselves. There is also danger, perhaps greater, of going to the other extreme. Syphilis has been called the great imitator of diseases, and so may neurasthenia be called the great imitator of the symptoms of disease.

A few rules have been laid down to aid us in differentiating between organic disease and neurasthenia and may be here repeated:

1st. "The symptoms of organic disease are usually fixed and stable, while very many of those of neurasthenia and allied states, are fleeting, transient, metastatic and recurrent."

2nd. "There are certain, though not well or always recognized symptoms of neurasthenia or allied states, which do not often, if at all, appear in structural disease." Among these may be mentioned tenderness of the scalp, ticklishness, facial reddening, fidgetiness, morbid fears, morbid desire for stimulants, and hopelessness.

3rd. "In organic disease reflex activity is usually diminished, in functional disease reflex activity is usually increased." This distinction is of particular aid since many of the phenomena referred to as neurasthenia are excited by reflex action. The human body, in a state of health, is a bundle of reflex action which is generally increased when a state of neurasthenia exists. In hysteria, for instance, the slightest touch or the gentlest excitement may bring on violent convulsions or other phases of the disorder. The three great centers of reflex activity are the brain, the stomach and the reproductive organs. When a man has a pain in the calf of the leg, in the arm, or in the fingers, he may have been thinking or worrying too much; general aching of the bones, creeping sensations, cardiac palpitation, etc., may be traced to the stomach, and the many reflex symptoms that may arise from perverted sexual function are familiar to us all.

4th. "Neurasthenia and allied troubles are most likely to occur in those in whom the nervous diathesis predominates."

In laying down the foregoing rules, mention was made of "allied states." This, I think, refers especially to hypochondria and hysteria. The term hypochondria should, I think, only be applied where there exists a morbid fear of disease from ignorance only, which fear may sometimes be readily dispelled through proper instruction by the physician in whom the sufferer may have confidence. Hysteria manifests itself in paroxysms. The symptoms are acute and violent and may disappear suddenly. We have the convulsions and globus hystericus, great emotional activity and ovarian tenderness, and not necessarily any physical debility. The opposite may be said of neurasthenia.

Anemia should not be confounded with neurasthenia. The symptoms of anemia are usually marked and well defined, and by the aid of

the more modern appliances such as the microscope, the hemoglobinometer and the blood-count, we cannot easily go astray.

A disorder that may be especially mistaken for neurasthenia is lithemia. The simple fact that an abundance of uric acid is found in the urine does not determine that an array of symptoms which a patient may present, is due to lithemia. If, however, in addition to the presence of uric acid we discover a sallow complexion, periodical attacks of constipation, confession of indiscrete diet, and insufficient exercise, and occasionally an uncontrollable temper, and if by correcting these habits both as to eating, drinking and exercise, and by proper remedies improve elimination and then see improvement, we may set the case down as one of lithemia.

It has been my endeavor to briefly mention some of the more prominent symptoms of neurasthenia and to give a few hints in regard to the differential diagnosis. The prognosis and treatment I will leave perhaps for some future consideration. I will, however, mention here that most cases recover, others are followed by alcoholism, morphinism, chloralism, melancholia or some grave organic disease. The treatment should be as varied as are the symptoms. If you treat two cases alike the chances are that one of them will be wrongly treated. Attention to hygiene and proper nourishment is, of course, as important as in all other diseases.

Among the drugs that may be made use of, we may mention the bromides, cannabis indica, and zinc combinations. Mental therapeutics is important—work or rest cure—travel or stay at home cure—according to the condition of the patient. Also massage, and electricity in measured doses either in the shape of the faradic or galvanic current, or the static spark. The molecular disturbance which electricity produces in the nervous system seems to improve the latter's power for absorbing nourishment. A year or so ago a medical friend of mine, a big and robust man, went to Berlin for post-graduate work. He devoted himself very closely to study and also gave more than necessary thought to his family and future. He soon found himself ailing from some of the symptoms which I have mentioned, and accordingly consulted one of his instructors and was told that he had sugar in the urine. As a medical man he knew, or thought he knew, the significance of this, and started for home. In Chicago he consulted a prominent specialist, who failed to find sugar and advised him to travel. Following this advice he started with his family for the Pacific coast, but told me that the miseries he suffered while traveling were indescribable. He returned to Milwaukee and started to practice his profession in that city, but owing to his condition, was unable to attend to what little work came his way. His friends were commencing to ridicule him and he became reticent about complaining. Some physician recommended to him the X-ray treatment. Following this advice my friend began to improve immediately and is now well. This is but an instance showing how such diseases may be brought on, how little sympathy such unfortunates receive, what a variety of treatments are recommended, and how difficult it is to hit upon the right treatment.

WISCONSIN MEDICAL JOURNAL.

OFFICIAL ORGAN OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A Monthly Journal, published by the Wisconsin Medical Journal Publishing Co., and owned by and devoted to the interests of the Medical Profession of this State.

Original articles, Clinical notes, Correspondence, and Communications of interest to the Medical Profession are solicited. Reprints of articles contributed to this Journal will be furnished at cost price, but a number of copies of the Journal will be furnished contributors gratis. All manuscripts should be typewritten.

ARTHUR J. PATEK, A. B., M. D., Editor,
141 Wisconsin Street, Milwaukee.

Associate Editors.

CHAS. S. SHELDON, M. D., Madison.
HOYT E. DEARHOLT, M. D., Milwaukee.
OTTO H. FOERSTER, M. D., Milwaukee.
ALBERT W. MYERS, M. D., Milwaukee.

Collaborators:

Horace M. Brown, M. D.,	Milwaukee	U. O. B. Wingate, M. D.,	Milwaukee
Arthur J. Burgess, M. D.,	"	Chas. Zimmerman, M. D.,	"
Richard Dewey, M. D.,	"	Frank H. Edsall, M. D.,	Madison, Wis.
Louis Frank, M. D.,	"	W. E. Fairfield, M. D.,	Green Bay, "
Walter Kempster, M. D.,	"	Wm. E. Ground, M. D.,	W. Superior, "
William Mackie, M. D.,	"	Julius Noer, M. D.,	Stoughton, "
Solon Marks, M. D.,	"	Chas. W. Oviatt, M. D.,	Oshkosh, "
P. H. McGovern, M. D.,	"	L. H. Prince, M. D.,	Palmyra, "
Gilbert E. Seaman, M. D.,	"	H. Reineking, M. D.,	Milwaukee, "
Wm. H. Washburn, M. D.,	"	W. T. Sarles, M. D.,	Sparta, "

Annual Subscription, - - - $2.00. Single Copies, - - - - - $0.20.

Address all business communications to
M. M. TAYLOR, Business Manager,
1106-1111 Herman Bldg., Milwaukee, Wis.

Vol. II. MAY, 1904. No. 12.

EDITORIAL COMMENT.

THE ANNUAL MEETING.

The Annual Meeting of the State Medical Society will take place in Milwaukee, June 22-24.

The members of this Society may with reason look forward to this meeting as one of prime importance. The successful issue of the reorganization plan, the details of which have appeared in our secretary's monthly chats, have shown, step by step, the general advance made by the district councilors; so well and under such able generalship has this work been done that we are now justified in looking forward to a united medical profession in Wisconsin.

For the first time in this State's history have all the reputable physicians joined their individual efforts to make a great movement a great success, and the representation at the coming annual meeting will justify this success.

In justice to the medical profession of this country as represented in the American Medical Association, each component part must do its duty in no half-hearted manner. It is incumbent upon the Society of this State to prove that reorganization within the state has been of general value, and this can only be done by a gathering, rich in men and material, and excelling in productiveness all our former conclaves.

Besides an excellent medical program that includes addresses by two prominent physicians from without the State, the entertainment committee has outlined other features that will add materially to the general enjoyment.

Let every member of every County Society be on hand to give hearty welcome to the new order of things, and prove by his co-operation that he feels that his individual interests are being furthered by all that affects the general interest.

Once again—make your plans NOW to be in Milwaukee on June 22-24.

AS TO RADIUM.

It is to be regretted that such a vast amount of undigested material, drawn from crude experiments and unwarranted deductions, should appear in lay and medical journals alike.

At the present time a conservative consideration of the results obtained, fails to demonstrate, to say the least, any advantage of radium over the X-Ray.

The radiations from radium are not widely different from those produced inside a Crooke's tube, in fact, radium rays do not possess the power of penetration of the X-ray.

Further investigation may develop the fact that the three varieties of rays thrown off by radium, may have a field of their own in certain affections not amenable to the other forms of radio-therapy. A great many reliable reports are available, detailing the cure of many surface diseases, some of them having resisted all other methods; these, perhaps because of locality or character, were especially suited to the radium treatment.

As to the results obtained in cancer and other deep-seated, malignant growths, the burden of proof at the present time certainly points against the usefulness of the radium ray. The situation may, of course, be changed by time and advance in methods.

NEWSPAPERS TAKE NOTICE.

In an editorial in our last issue we expressed the opinion that only by legislative enactments, such as have been put into effect in Michigan and Iowa, can the lay papers be cleansed of their foul advertisements. That at least two prominent papers of large circulation have volunteered to do that which was thought to be the impossible—namely, refuse to accept medical advertisements—is an ideal solution whose consummation we hardly dreamed would come to pass. The managers of the New York Times and the Ladies' Home Journal have conquered the temptation to accept the gold of lying charlatans and manufacturing firms, and their moral sense has won out over cupidity.

All honor to them. Wisconsin "papers will please copy," but—the millenium has not yet arrived.

ART IN JOURNALISM.

When in the field of medical journalism some periodical of genuine intrinsic merit comes to us, we cannot refrain from calling attention to what appears to us as of the greatest importance to the physician and specialist. Rarely has it been our pleasure to scan the pages of a medical journal that has given us the genuine satisfaction we have derived from *The Journal of Cutaneous Diseases* (The Grafton Press, New York) in its new dress.

The articles are well chosen and cover the special field of diseases of the skin and syphilis. We would call particular attention, however, to the illustrations, which are masterpieces of excellence. Dermatology can be taught only by models and drawings, and the journal in question is certainly to be congratulated upon the artistic pictures that elucidate the text.

The general practitioner frequently comes in contact with skin affections, and this most excellent periodical that represents the field of the dermatologist, deserves a very general popularity.

A CONCESSION FROM THE PROPHETESS.

The Christian Science church has given to the world the following information as being a section of the by-laws of Mary G. Baker Eddy's creed: "If a member of this church has a patient that he does not heal, and whose case he cannot fully diagnose, he can consult with an M. D. on the anatomy involved."

We were not aware that a knowledge of anatomy entered so strongly into this cult's methods. It has been our impression hitherto

that the possession of some organs—notably the brain—was at least a matter of indifference, and not essential. To what possible use the cranial cavity may be put in Christian Science work we cannot conceive, unless it be to give space for the enlargement of the bump of cupidity and stupidity.

Christian Science, we are told, is gaining adherents abroad, but the rumor lacks confirmation that a consignment of healers has offered its services to the Russians and Japanese in their present struggle for supremacy in the Orient. War would not be the hell it is if a chapter out of the oft-wedded prophetess' bible could make non-existent the torpedo's awful carnage.

NEWS ITEMS.

Dr. Almon Clarke, for many years surgeon in chief at the National Soldiers' home in Milwaukee, died May 1st at Pensacola, Fla.

Dr. Clarke was born in Granville, Windsor county, Vt., Oct. 31, 1840, and at the breaking out of the war of the rebellion was appointed surgeon of the First Vermont cavalry, and served through the war, being with his regiment at Mine Run, the Wilderness, Cold Harbor, Cedar Creek and through the campaign in the Shenandoah Valley.

At the close of the war he came to Wisconsin and located at Sheboygan, where he practiced for a number of years. Dr. Clarke was appointed chief surgeon at the Milwaukee Soldiers' home, filling that post with honor and credit until about two years ago, when advancing years led him to resign. After resigning he went to Pensacola, where he made his home until his death.

Dr. Clarke was an ex-president of the State Medical Society of Wisconsin.

Frederick Stearns & Co.'s Jubilee.— On April 7th Stearns & Co. celebrated the wooden anniversary of the establishment of their biologic laboratories. Several hundred Detroit physicians were guests at the celebration.

The regular work of the department was carried on as usual, affording the physicians an opportunity to see in operation the processes used in the production of diphtheria antitoxin, streptolytic serum and glycerinated vaccine.

The stables provide for the care of 120 serum yielding horses, the start having been made five years ago with but three horses.

A buffet luncheon was served in the travelers' annex and wooden souvenirs were distributed.

The management of the Milwaukee County Hospital is to be investigated by a committee of the County Board, as the result of charges preferred by the secretary of the Associated Charities. So far as published the charges are of the usual character—poor food, abuse of clinics, etc., and are denied

by Dr. Grosskopf, the Superintendent, and the Medical Staff of the Institution and an investigation is welcomed. Those of the medical profession who are acquainted with the management of the Hospital regard the charges as unwarranted and hope to see the matter speedily disposd of with justice to all concerned.

The Tri-State Medical Society of Iowa, Illinois and Missouri will meet in St. Louis, June 15th, 16th and 17th. An interesting program is being prepared, and some of the most distinguished physicians and surgeons of the country will attend the meeting. The president is Dr. W. B. La Force, Ottumwa, Iowa; and Dr. Louis E. Schmidt, 1003 Schiller building, Chicago, is the secretary. Dr. James Moores Ball, 3509 Franklin avenue, St. Louis, is chairman of the Committee of Arrangements.

The Medical Society of Milwaukee County has created a committee whose duties are to collect statistics and facts concerning tuberculosis, to disseminate knowledge of the sanitary aspects of the disease among the laity by means of an exhibition and lectures, and to work in the direction of the establishment of a County Sanitorium for the tuberculous poor. The Committee consists of Dr. U. O. B. Wingate, Chairman, Drs. J. W. Coon, Hoyt E. Dearholt, D. W. Harrington, J. W. Beffel and L. F. Jermain.

The Milwaukee Medical College graduated a class of 22 in the medical course, May 2nd. The graduation exercises were held at the Alhambra theater. The Dean, Dr. W. H. Neilson, presented the class, the President, Dr. W. H. Earles, conferred the degrees, and Dr. L. A. Dahl delivered the valedictory address. A banquet was held at the Plankinton House in the evening, participated in by the class, the alumni and the faculty.

Benjamin F. Dodson, M. D. died at his home in Berlin, April 12, aged 72. Dr. Dodson was a pioneer physician and one of the most esteemed citizens of Berlin. He was a brother of Dr. N. M. Dodson of Berlin, and an uncle of Dr. John M. Dodson of Rush Medical College. Dr. Dodson was a member of the Green Lake County Medical Society and of the State Medical Society of Wisconsin.

Ohio to Treat Tuberculosis.—On April 20 the Ohio House passed Senator Heinbrins' bill providing for a state hospital for tuberculosis patients, and it will become a law as soon as signed. The bill appropriates $35,000 for the purpose of a site and preliminary work, and an additional $10,000 will be available next year.

Ohio Medical Law Held Void.- In the common pleas court at Sandusky, Ohio, Judge Reed ruled that the Ohio state medical law is unconstitutional because it limits the right of practice without the use of drugs or medicines to osteopaths, and by the rule of exclusion Christian Scientists are prohibited.

Chas. R. Bardeen was elected Professor of Anatomy at the University of Wisconsin. He comes from the Johns Hopkins medical school and has done a large amount of original work.

L. W. Sayles, M. D., of Shell Lake, has disposed of his interest to E. R. Hering, M. D., and is about to take up postgraduate work in Chicago.

W. F. Brownell has been appointed city physician of New London.

CORRESPONDENCE.

BERLIN LETTER.

(Special Correspondence.)

In an address before the Anglo-American Medical Association of Berlin, Prof. Israel mentioned some of the recent advances in our knowledge of diseases of the kidney, and closed with the surgical treatment of nephritis. Many men, said he, use the terms nephritis and Bright's disease rather loosely. Strictly speaking Bright's disease is one due to the action of poisonous substances circulating in the blood, and these may be of bacterial or non-bacterial origin. Hence, it is always a bilateral disease. Nephritis, on the other hand, may have a local cause and thus may affect only one kidney, just as unilateral surgical diseases of the kidney occur.

A bilateral nephritis may run along for years and give symptoms pointing to a one-sided kidney affection. A unilateral nephritis does occur, though rarely, and may give symptoms simulating closely, surgical affections of the kidney. Indeed, the majority of the cases that were called angio-neurotic hematuria were really cases of nephritis. Prof. Israel had operated on many cases which had given symptoms of typical attacks of renal colic, associated with unilateral hematuria, and was sure he would find a calculus or neoplasm, but, to his surprise, found nothing macroscopically. Still, having removed a small piece, microscopically—in all such cases—he found evidence of a parenchymatous or hemorrhagic nephritis.

In a long series of cases, with unilateral hematuria and colic, 62% showed nothing at operation and only the microscope revealed the existing nephritis. In the early operations on such cases, the results were bad. This was partly due to the fact, that in his zeal to find the calculus or neoplasm diagnosed, the operator enlarged his incision unnecessarily and maltreated the kidney in his hunt to find what was not there. A healthy kidney could hardly stand such treatment, much less one suffering from nephritis. In the second place, having found nothing, the kidney was usually sewn up, and no provision made for drainage.

Later, when the kidney was incised and explored gently, and then not sewn at all, but simply drained, it was noticed that such cases went on to uneventful recovery, and had no recurrence of the symptoms, although the nephritis itself was not cured. It was noted in all these cases, that shortly after incision and drainage, there was a rapid

increase in the amount of urine. This led several men to try such treatment in cases of intractable anuria and the results were gratifying.

In regard to the surgical treatment of Bright's disease, a critical summary of the work of Edebohl's and others was given, and Prof. Israel denied that any lasting benefit was shown. Besides, the mortality was quite high. He had tried Edebohl's operation in six cases without benefit in a single case, and thought he had hastened the death of several of them.

In conclusion he said that modern kidney surgery had taught us that much may be done in intractable cases of hematuria and colic and anuria due to nephritis, but that nothing could be done to cure the disease itself, and, further, that the bad results thus far did not warrant further use of the Edebohl's operation. (M. M. P.)

BALTIMORE LETTER.

On February 24, 1904, the meetings of the Laennec Society for the Study of Tuberculosis were resumed. Dr. H. Barton Jacobs was elected President to succeed Dr. Wm. T. Osler, and Dr. H. Warren Buckler was re-elected Secretary. The first meeting was taken up with a discussion of *Miliary Tuberculosis*, after the opening of the program by a paper entitled "The Fight Against Tuberculosis in New Zealand" by Dr. Wm. Stephen of Riverton, New Zealand. This little island community has apparently done more by the enforcement of good sanitary regulations toward the stamping out of the disease than any other country in the world. The symposium on Miliary Tuberculosis was made up as follows:

Historical Note—Dr. Wm. H. Welch.

Recent Studies on Pathology of—Dr. E. L. Opie.

Clinical Features—Dr. Wm. Osler and Dr. Rufus Cole.

The second meeting of the Laennec Society was held on March 24th. The subject for the meeting was "Hodgkins Disease in Its Relation to Tuberculosis." Four papers were read. Dr. Dorothy M. Reed of New York read a paper on the pathology, Dr. W. T. Longcope of Philadelphia discussed the differential diagnosis, Dr. W. S. Halsted spoke on the surgical side of the subject, and Dr. McCrae gave the clinical features from the medical standpoint.

Several interesting meetings of the Johns Hopkins Hospital Medical Society have been held during the past month. At the meeting held on March 28th Dr. Futcher discussed the question of gout in the negro, with the report of two cases. The first case, Louis Bostin was admitted first in Dec. 1902 complaining of rheumatism in the left big toe. He gave a marked alcoholic history but had never had any of the acute infectious diseases. Besides the acute gout from which the patient was suffering at this time the heart was found enlarged, and the diagnosis of mitral stenosis and insufficiency and aortic insufficiency was made. His heart lesions, however, were giving him no inconvenience. In December 1903 he was admitted a second time for broken

compensation, but there was no recurrence of his gouty arthritis. Compensation was regained after some weeks in the hospital and he went home to return again with broken compensation on March 5th, 1904. He went to pieces rapidly and died the next day. At autopsy the diagnosis of the heart condition made during life was confirmed and gouty deposit was found in the joints of both big toes.

The second case, Nathan Smith, was admitted Nov. 9, 1903, with headache, vomiting anemia, dyspnea, puffiness of the face, and albumin and casts in the urine. While in the hospital he developed an acute arthritis in the left big toe. Later he became uremic and died in coma Dec. 30, 1903. At autopsy the heart was found to present a marked degree of fatty degeneration; there was a chronic interstitial nephritis, and deposits of sodium biurate were found in the joint which had been involved in the arthritis. These two cases are of interest only from the fact that they occurred in negroes. Gout is very rare in the colored race—these two cases being the only ones observed at the Johns Hopkins Hospital since the hospital opened. Dr. Futcher's paper was followed by a talk on the Metabolic Change in Gout by Dr. Schmoll.

Dr. Kelly reported four cases of pregnancy following myomectomy and presented an instrument to the society which he called 'piezometer' by means of which he maps out the outlines of abdominal tumors.

The last paper on the program was by Mr. Bean on Variation in the Branches of the Subclavian Artery. (R. G. W.)

CLINICAL REPORTS.

REPORT OF AN UNUSUAL CASE OF VICARIOUS MENSTRUATION.

By A. W. Myers, M.D., Milwaukee.

X. Z., aged 40 years, unmarried, a domestic servant, with a distinctly neurotic family and personal history, came under observation in November, 1902, complaining of pain, swelling, and a sense of fullness of the right side of the face. The history she gave was that about a week before, on the first day of her menstrual period, she had been very severely frightened, thinking the house was on fire, and that the flow had been abruptly checked. A few days later the pain in her face began, followed by the swelling. The first inclination was not to attach much importance to these circumstances but the event proved this to be a mistake.

On examination the pain was found to be of a neuralgic nature and confined chiefly to the area of distribution of the infra-orbital branch of the fifth nerve although there was some pain in the supra-orbital region as well. There was a dark semi-circle below the right eye, noticeably larger and darker than that on the left side. The right side of the face presented a puffy appearance, but there was no

edema, infiltration, or redness. The thought of an antral abscess suggested itself but examination of the nose and mouth gave negative results. The temperature, pulse and respiration were normal. The pain which was constant and very severe resisted treatment for several days; during this time the circles under her eyes became larger and darker, that on the right side having almost an ecchymotic appearance. Finally her menstrual flow reappeared and the symptoms at once ameliorated, clearing up entirely within a few days.

Her next period began on Dec. 3rd, and proceeded uneventfully for two days when it suddenly ceased after an exposure to cold air when overheated. On the following day she complained of stiffness and soreness in the left side of her neck, and her nose bled several times without any provocation. On examination the deep cervical lymphatic glands on the left side anteriorly were found to be swollen and tender from the angle of the jaw well down to the clavicle. The head was held towards the right shoulder and all motion was painful. This condition remained much the same for several days; the bleeding from the nose was not repeated, but instead there was some oozing from the mucous membrane of the mouth so that the saliva was constantly blood-tinged, although no erosions could be seen. There was a slight cough and the sputum was reddish in color. The respirations were rather rapid and shallow and there was a slight feeling of oppression on the left side of the chest.

On the 10th of Dec., the swelling of the glands increased very considerably, some of them seemed almost to fluctuate, the pain was more severe and the respirations were very hurried and shallow and confined chiefly to the right side of the chest. The patient complained that the left side of the chest felt as though "compressed under a heavy weight," and there seemed to be very little movement of the diaphragm on this side, owing, no doubt, to the pressure of the enlarged glands on the phrenic nerve. Her condition at this time was alarming but on the following day her menstrual flow began again and the cervical condition at once improved. The next day she vomited some blood but the menstrual discharge was now profuse and the swelling of the glands was rapidly disappearing. On Dec. 15th, three days later there is a note that "the flow has ceased but there is still a little enlargement of the deep glands anteriorly and slight tenderness." This cleared up gradually but completely in the course of a few weeks.

A few days before the next menstrual period the posterior cervical lymphatics on the left side became much enlarged and very painful and again the head was pushed to the right and held steadily in that

position on account of the pain on motion. When the flow began the swelling commenced to subside, and before the end of the period, which lasted about a week, it had greatly diminished, although here, too, it was several weeks before the glands become entirely normal.

After this last experience she consented to go to a hospital and remained there quietly over the next two periods which were normal and since that time she has had no return of this singular derangement.

Vaginal examination revealed a retroverted uterus for the correction of which she has worn a pessary for a number of years; no other abnormality.

It seems probable that the local pathological changes consisted chiefly of an extreme dilatation of the blood vessels, although the blood-tinged saliva and sputum, the epistaxis and the vomiting of blood, and the persistence for several weeks of a little induration of the affected glands would seem to show that there was some actual escape of blood through the vessel walls.

THE BIER TREATMENT OF JOINT DISEASES.*

By A. N. Baer, M.D., Milwaukee.

I wish to demonstrate this patient to you to show a very successful modern treatment of joint diseases, named after its inventor, Professor Bier, of Greifswald, Germany.

You see here the results of eight weeks' treatment in a case of tuberculosis of the knee joint.

When I first saw the patient 10 weeks after the onset of the disease, she was lying in bed and unable to move her right knee. The joint was swollen so that its circumference was at least twice its present size. The ankle was also swollen. There was a contracture of the knee of about 45°. It was sensitive to touch and the recesses of the joint showed clearly.

The present deformity is due to a thickening of the capsule and to a slight backward subluxation of the tibia. The patient is able to bend her knee of her own accord without any sensation of pain. Extension, however, produces pain due to the subluxation. There is of course a marked atrophy of the muscles of the thigh as well as of those below the knee. The entire leg is shortened about 1½ inches. In consequence of these changes the patient limps, and has pain.

However, I think that the result of the treatment thus far is very satisfactory; the granular inflammation of the joint has nearly dis-

*Demonstration before the Milwaukee Medical Society, March 8, 1904.

appeared and I hope in a few weeks to be able to show the patient further improved and in the possession of a movable joint, a result not obtainable through any other method of treatment.

The treatment consists in the production of active or passive hyperemia of the joint, or of the alternate use of both. The active hyperemia is produced by the influence of hot air in the Betz apparatus familiar to all of you. In some cases I am in the habit of giving cold douches to the joint, following the hot air, in order to produce a reaction which increases the effect considerably.

Passive hyperemia is produced in the following manner: I bandage the foot and the lower limb with a common gauze bandage up to one inch below the joint. Then I apply a rubber bandage around the thigh, to within one inch above the joint. This step in the procedure is the only one that requires a nice degree of discrimination, acquired only after considerable experience, to secure the required degree of pressure, sufficient to shut off entirely the venous circulation in the joint without interfering with the arterial flow. If the patient experiences pain after the application it indicates that the bandage was too tight. If not tight enough, results will be unsatisfactory.

In these critical days whoever advocates a new method of treatment must give satisfactory physiological reasons to uphold his contentions. I think in this case it is not a very difficult task to do this. It is acknowledged that every infection of the body produces antitoxines or similar substances in the blood-serum. Through the active as well as the passive hyperemia we bring the diseased tissues in contact with more blood than normally, and this is especially the case in passive hyperemia, for we know by experiments that the tissues themselves are bathed in extravasated serum which is subsequently carried away by the resultant hyperemia of reflex origin.

I again call your attention to this joint in which you see all the symptoms of venous congestion, viz.: swelling and violet discoloration.

MICROSCOPIC AIDS IN DIAGNOSIS.

By Howard J. Barry, M.D., Sun Prairie, Wis.

At the present age, when all sciences are making such strides and improvements in their technic, let not our fraternity be at a standstill. Medicine is no longer a profession but a science and it has been made such because our members are and have been making use of instruments of precision, including the microscope. I say *our* members, but let me say that only a part of them, and only a small part, are

using the microscope. These few, however, are the ones who have changed medicine from a profession to a science.

At the present time, it is conceded by all, that no absolute diagnosis can be made without the aid of this valuable instrument. Many cases of mild pneumonia, typhoid, all blood diseases, etc., cannot be recognized without its aid. Our dread disease consumption, cannot be recognized for a certainty in its early stages and often even later without the microscope. And let me say, were it more frequently used, the diagnosis would be made in a great many cases early enough for the afflicted to obtain the beneficial effects of a change in climate. It would also aid in lowering the mortality as much as any one thing that has been discovered up to the present time, or that is likely to be found for some time to come.

The older members of our profession had no training in this line of diagnosis. However, in a few months' time they could acquaint themselves with it sufficiently to have a working knowledge, and this could be broadened in their daily private work. If this cannot be done, there is another alternative. For a small fee, they could have the diagnosis made by someone who is capable of doing this work, or it can be done at some laboratory. Various blood diseases often fail of recognition because the proper methods of examination are not brought into play.

I have seen a typical case of pernicious anemia treated for tuberculosis, when it could easily have been differentiated. I have also seen a case of ordinary tuberculosis taken for cancer of the stomach. Such errors by our members will never make medicine a branch of science to be more highly respected. This is not progressive medicine and the errors made in the two cases mentioned were due to the fact that the microscope had not been brought into use.

In medicine there is, at the present time, no limit to the advancement which can be made, and in looking for a field, there is none that offers a better opportunity than does the field of microscopic medicine. With the whole medical fraternity working hand in hand, we can look for even greater advancement during the next ten years, and this progress will be reflected upon the layman who will accord the scientific practitioner greater regard.

By adopting this commendable practice our science will forge ahead and continue to be in the lead of other branches of scientific work.

THE STATE MEDICAL SOCIETY OF WISCONSIN.

ORGANIZED 1841.

Officers for 1903-1904.

F. E. WALBRIDGE, Milwaukee, President.
JAMES MILLS, Janesville, 1st Vice-Pres. C. C. GRATIOT, Shullsburg, 2nd Vice-Pres.
CHAS. S. SHELDON, Madison, Secretary. S. S. HALL, Ripon, Treasurer.

Provisional Councilors.

1st Dist., J. G. Meachem, - - - - Racine
2nd Dist., J. S. Walbridge, - - - - Berlin
3rd Dist., C. S. Smith, - - - - - Elroy
4th and 5th Dist., G. A. Kletzsch, - Milwaukee
5th Dist., Geo. V. Mears, - - - Fond du Lac
7th Dist., W. T. Sarles, - - - - Sparta
8th Dist., J. F. Pritchard. - - Manitowoc
9th Dist., T. J. Redelings, - - Marinette
10th Dist., J. M. Dodd, - - - - Ashland
11th Dist., E. L. Boothby, - - - Hammond

Next Annual Session, Milwaukee, June 22, 23, 24, 1904.

The Wisconsin Medical Journal, Official Organ.

SOCIETY PROCEEDINGS.

ORGANIZATION NOTES.

Annual Meeting.

During the past month the Buffalo-Pepin County Medical Society has reported with 12 members, the Forest-Florence with 4, and Eau Claire with 16. The 6 wandering sheep—Adams, Richland, Calumet, Waushara, Door and Kewaunee—have not yet been gathered into the fold. They certainly *will* be during the month of May. There are now 56 Chartered County Societies. Walworth and Oconto are organized, but not yet chartered. In the 6 unorganized counties there are likely to be 4 more County Societies. This will make in all 62 County Societies in the State. The number of members who have paid their dues in these Societies for the current year is 1185. When all the Counties have reported and finished collection of dues it seems likely that the estimate of 1300 members by the time of the Annual Meeting will be realized.

Again, all are earnestly requested to pay the Annual State dues to the County Society at once, since this is the only means of preserving your standing in the State Society or the American Medical Association. However, if this has not been done before June 22nd, and since it has been the custom heretofore to pay the dues at the Annual Meeting of the State Society—an exception will be made this year only and your dues will be accepted at that time.

The following counties have as yet reported no delegates to the Annual Meeting—Bayfield, (Buffalo-Pepin), Columbia, Crawford, Eau Claire, Forest-Florence, Kenosha, Lincoln, Oconto, Outagamie, Pierce, Racine, Sauk and Taylor. It is important that delegates be appointed in these counties at once, that they may have ample time to arrange to attend the meeting.

"Each component County Society shall be entitled to send to the House of Delegates each year one delegate for every 50 members, and one for each major fraction thereof." (IV. 2. By Laws.)

The Program of the Annual Meeting is printed in this number of the JOURNAL. Clearly you cannot afford to miss such a promise of good things. The Addresses in Medicine and Surgery by Drs. Wilson of Philadelphia and Park of Buffalo are sure to reach the very highest standard. To hear them alone is well worth your attendance. But the whole program is made up of subjects in which you are interested and which represents much of the best ability in the Society.

Dr. Holbrook, the Chairman of the Committee on Arrangements, writes that plans have been laid which will fill the bill in every particular—including the comfortable provision for a large attendance, and the very best kind of a time generally. The Athenaeum Building—Cass and Biddle Streets—has been secured, and is admirably suited for the purpose. Here—beside the ample auditorium—will be located the rooms for Pathologic Exhibit, Drug Exhibits, room for meeting of House of Delegates, etc. Matters social are by no means neglected. The usual Smoker will be held at the rooms of the Milwaukee Medical Society on Wednesday evening the 22nd. There will be a supper and concert on Thursday evening, at some suitable place (out-doors if pleasant, indoors if not) to which the ladies are invited. An informal reception will be given the visiting ladies by the wives of the Milwaukee physicians at some hotel on the evening of the 22nd (while the men are at the Smoker). A coach ride for the ladies will be given by the local ladies on the morning of Thursday, followed by a breakfast-luncheon at the hotel. Other receptions may be given if time permits. *Accordingly,* this is the year for you to bring your wives and daughters, *sure.* The *better* half of the profession need to become acquainted as well as the *worser.*

The attendance this year will doubtless be sufficient to secure railroad rates. It is on the Certificate plan. Let every one remember to obtain Railroad Certificates from the local agent to bring to the meeting. 100 are necessary. The round fare is 1 1/3.

Remember the Pathologic Exhibit. This feature of the meeting should each year grow in interest and importance. The specimens should be labeled with the name of the surgeon—a brief history of the case and a description of the operation. These specimens and all communications regarding them should be sent to Dr. Franz Pfister, 760—3rd St., Milwaukee, who has charge of all exhibits.

Everything points to the largest attendance, by far, in the history of the Society, with all parts of the State well represented. It will be a practical demonstration of the first fruits of the organization of the Medical Profession of Wisconsin. You cannot afford to stay at home and miss it. (C. S. S.)

PRELIMINARY PROGRAM.

The following preliminary announcement of the program for the next meeting of the Society, is necessarily somewhat incomplete at this time. Members desirous of making changes in the program should immediately notify the Chairman of the Program Committee, DR. HENRY B. HITZ, Goldsmith Bldg., Milwaukee.

ORDER OF PROCEEDINGS.

WEDNESDAY, JUNE 22, 1904.

MORNING SESSION—11:00 O'CLOCK.

Call to Order by the President—F. E. Walbridge.
Invocation.
Address of Welcome.
Response by the President of the Council.
Report of Arrangement Committee—A. T. Holbrook (Chairman.)
Report of Program Committee—H. B. Hitz (Chairman).
Report of President of the Council—W. T. Sarles.

RECESS.

WEDNESDAY AFTERNOON—2:00 O'CLOCK.

The President's Address—F. E. Walbridge, Milwaukee.

The Indication for Enterotomy in Intestinal Obstruction, with Report of some Cases—F. Shimonek, Milwaukee.

Discussion opened by H. Reineking, Milwaukee; W. A. Batchelor, Milwaukee, and A. J. Burgess, Milwaukee.

The Moral Aspect of Abortion, Craniotomy, and Extra-uterine Pregnancy—T .L. Harrington, Milwaukee.

Discussion opened by A. J. Burgess, Milwaukee; Edward Evans, La Crosse, and B. C. Brett, Green Bay.

The Use of Drugs in Labor—J. F. Ford, Omro.

Discussion opened by Harry B. Sears, Beaver Dam; Ernest C. Helm, Beloit, and L. H. Pelton, Waupaca.

Intermittent Claudication and Arterio-Sclerosis—Arthur J. Patek, Milwaukee.

Discussion opened by W. F. Wegge, Milwaukee; W. F. Becker, Milwaukee; W. H. Washburn, Milwaukee.

Estimation of Indemnity in the Case of Accidental Loss of One or Both Eyes—H. V. Würdemann, Milwaukee.

Discussion opened by W. Kempster, Milwaukee; Chas. Zimmermann, Milwaukee; F. T. Nye, Beloit.

THURSDAY MORNING, JUNE 23, 1904.

9:00 O'CLOCK.

Regarding the Lack of Progress in Scientific Therapeutics—E. L. Boothby, Hammond.

Discussion opened by C. C. Gratiot, Shullsburg; A. B. Newton, Bangor; G. C. Buck, Platteville.

The Therapeutic Uses of the Roentgen-Ray in Dermatology—Louis Frank, Milwaukee.

Discussion opened by A. W. Myers, Milwaukee, and J. D. Madison, Milwaukee.

10:30 O'CLOCK.

The Annual Address in Medicine—James C. Wilson, Professor of Practice of Medicine, Jefferson Medical College, Philadelphia, Pa.

Importance of the Early Removal of All Neoplasms, Whether Malignant or Benign, with Illustrated Cases—C. W. Oviatt, Oshkosh.

Discussion opened by H. A. Sifton, Milwaukee; Herman Reineking, Milwaukee, and William Mackie, Milwaukee.

Affections of the Facial Nerve in Ear Diseases—Chas. Zimmermann, Milwaukee.

Discussion opened by H. B. Hitz, Milwaukee, and J. A. L. Bradfield, La Crosse.

Chronic Continued Secretion of the Gastric Juice—L. F. Jermain, Milwaukee.

Discussion opened by W. H. Neilson, Milwaukee, and W. H. Washburn, Milwaukee.

Recurrent Hydro-Nephrosis—G. D. Ladd, Milwaukee.

Discussion opened by William Mackie, Milwaukee; Richard Dewey, Wauwatosa; J. F. Pritchard, Manitowoc.

THURSDAY AFTERNOON, 2:00 O'CLOCK.

A Glimpse Into the Past, Present and Future of Therapeutics—S. R. Moyer, Monroe.

Discussion opened by J. A. Ballard, La Crosse; J. F. Pember, Janesville; C. C. Gratiot, Shullsburg.

A Review of Laryngeal Diphtheria with a Report of Cases—P. H. McGovern, Milwaukee.

Discussion opened by

On the Establishment of an Epileptic Colony in Wisconsin—W. A. Gordon, Oshkosh.

Discussion opened by Richard Dewey, Wauwatosa; W. F. Becker, Milwaukee, and E. L. Bullard, Mendota.

4:00 O'CLOCK.

The Annual Address in Surgery—Roswell Park, Professor of Surgery, University of Buffalo, Buffalo, N. Y.

Surgical Treatment of Cirrhosis of Liver with Report of a Case—William Mackie, Milwaukee.

Discussion opened by Edward Evans, La Crosse, and C. W. Oviatt, Oshkosh.

The Therapeutics of Diseases of the Female Pelvis—Gustav Kletzsch, Milwaukee.

Discussion opened by Frank S. Wiley, Fond du Lac; J. F. Pritchard, Manitowoc; T. W. Nuzum, Brodhead.

Early Diagnosis of Ectopic Gestation—W. E. Ground, Superior.

Discussion opened by A. J. Burgess, Milwaukee; C. W. Oviatt, Oshkosh; Edward Evans, La Crosse.

Report of Case of Perineo-Rectal, Transvesical Perforation of Peritoneum—Edward Evans, La Crosse.

Discussion opened by D. S. McArthur, La Crosse; M. E. Corbett, Oshkosh; W. F. Malone, Milwaukee.

FRIDAY MORNING, 9:00 O'CLOCK.

"Radio-activity." The Therapeutic Results We May Expect at Its Present Stage of Development—Wm. Sickles, Milwaukee.

Discussion opened by C. S. Smith, Elroy; H. C. Reich, Sheboygan.

Quantitative Estimation of Urea and Its Significance—C. J. Combs, Oshkosh.

Discussion opened by H. W. Abraham, Appleton; D. W. Harrington, Milwaukee, and J. W. Conley, Oshkosh.

Some Methods of Home Modification of Milk in Infant Feeding—A. W. Myers, Milwaukee.

Discussion opened by L. Boorse, Milwaukee; A. F. Heising, Menomonie; Carl M. Beebe, Sparta.

General Practice in Northern Wisconsin—J. P. Cox, Spooner.

PRELIMINARY ANNOUNCEMENT OF ARRANGEMENT COMMITTEE.

1. Sessions will be held in the Athenaeum building, corner of Cass and Biddle streets.

Meetings of the Society, House of Delegates and various committees, and the pathologic and commercial exhibits will be held in this building.

The first meeting of the House of Delegates will be held in the rooms of the Milwaukee Medical Society on the evening of June 21st, when important matters will be discussed.

2. Arrangements are in progress for the securing of reduced rates on all railroads.

3. The entertainment on the evening of June 22d will be the annual smoker given by the Milwaukee Medical Society.

For the evening of June 23rd a supper and entertainment is being planned to take the place of the more formal banquet.

4. The wives of the Milwaukee members have planned to entertain the visiting ladies at an informal reception during the evening of the men's smoker, and by a drive and noon breakfast on Thursday. They assure a cordial welcome to all ladies who can possibly come.

Visiting ladies are expected to attend the supper and entertainment of the society on Thursday evening.

A. T. HOLBROOK,
Chairman Arrangement Committee.

THE SEVENTH COUNCILOR DISTRICT.

Sparta, Wis., April 2, 1904.

Editor Wisconsin Medical Journal: Our Secretary, Dr. Sheldon, can now report to you the complete organization of the 7th Councilor District. Buffalo and Pepin Counties have formed one society, and Trempealeau and Jackson the other. The names of officers, their post-office addresses and number of men joining is in Dr. Sheldon's possession. The organizations were effected March 17. We will come to the annual meeting with a pretty well organized state—not completely organized but so nearly so that the following year will find us surprisingly ahead of our most sanguine expectations. For instance, this county of Monroe that formerly had but 8 members in the old state society, now has 20 members. This, I think, will be about the proportion of increase in this whole district.

W. T. SARLES,
Councilor, 7th District.

DIRECTORY OF COUNTY SOCIETIES.

COUNTY.	PRESIDENT.	SECRETARY.
Ashland	W. T. Rinehart, Ashland.	N. N. Glim, Ashland.
Barron-Gates-Polk	O. M. Sattre, Rice Lake..	I. G. Babcock,Cumberla'd
Bayfield	H. G. Lampson, Washb'n	T. B. Hicks, Washburn
Brown	D. H. Gregory, De Pere.	A. V. de Neven, Gr'n B'y
Buffalo-Pepin	M. B. Axtell, Pepin.....	P. B. Amunson, Mondovi.
Chippewa	C. A. Hayes, Chipp.Falls.	R. B. Cunningham,Cadott
Clark	D. R. Freeman, Colby...	V. M. French, Neillsville.
Columbia	J. J. Howard, Columbus.	F. D. Bentley, Portage.
Crawford	G. H. Perrin, Wauzeka..	A. J. McDowell, Sol. Gr'v
Dane	C. A. Harper, Madison..	R. H. Jackson, Madison.
Dodge	E. M. McDonald, B. Dam.	H. B. Sears, Beaver Dam.
Douglas	George Saunders.....	W. W. Pretts, Superior.
Dunn	E. H. Grannis, Menomo'e.	G. A. Barker, Menomonie
Eau Claire	J.V.R.Lyman,Eau Claire.	H. A. Fulton, Eau Claire.
Fond du Lac	J.H.McNeil, Fond du Lac.	Flora A.Reed,FonddaLac.
Forest-Florence	C. A. Decher, Crandon...	S. M. B. Smith, Crandon.
Grant	J. Oettiker, Platteville..	P. L. Scanlan, Lancaster.
Green	Sam'l Moyer, Monroe...	Wm. B. Monroe, Monroe.
Green Lake	C. E. Thayer, Markesan.	B. E. Scott, Berlin.
Iowa	W. J. Pearce, Dodgeville.	S. P. Deahofe,Mineral Pt.
Iron	J.H.Urquhart, Iron Belt.	T. J. Hambley, Hurley.
Jefferson	Wm. W. Reed, Jefferson.	C. E. Lander,Johnson C'k
Juneau	J. B. Edwards, Mauston.	A. T. Gregory, Elroy.
Kenosha	G. Windesheim, Kenosha	F. E. Andre, Kenosha.
La Crosse	F. C. Suitor, La Crosse..	C.H.Marquardt,La Crosse
Lafayette	C. C. Gratiot, Shullsburg.	C.Lehnkering, Darlington
Langlade	I. D. Steffen, Antigo....	Frank I. Drake, Antigo.
Lincoln	W. H. Monroe, Merrill..	C. C. Walsh, Merrill.
Manitowoc	Louis Falge, Reedsville..	J. E. Meany, Manitowoc.
Marathon	D. La Count, Wausau...	H. L. Rosenberry,Wausau
Marinette	T.J.Redelings, Marinette.	A. T. Nadeau, Marinette.
Marquette	W.J.Thompson, Briggsv'l	W. O. Dyer, Westfield.
Milwaukee	G.E.Seaman, Milwaukee.	A. W. Gray, Milwaukee.
Monroe	G. R. Vincent, Tomah...	C. M. Beebe, Sparta.
Oconto	.....	A. S. White, Gillett.
Oneida	C.D.Packard, Rhinel'der.	S. R. Stone, Rhinelander.
Outagamie	C. D. Boyd, Kaukauna..	M. J. Sandborn, Appleton
Ozaukee	E. E. Couch, Pt. Wash..	Thos.A.Berwick,Saukville
Pierce	Henry C. Cotton, Presc'tt	D.Woodworth, Ellsworth.
Portage	Galen Rood, Stevens Pt..	C.v.Neupert,Jr.,Stev's Pt.
Price	W. P. Sperry, Phillips...	A. D. Gibson, Park Falls.
Racine	W. S. Haven, Racine....	C. F. Browne, Racine.
Rock	Ernest C. Helm, Beloit.	G. W. Fifield, Janesville.
Sauk	Chas. Gorst, Baraboo...	G. L. Cramer, Baraboo.
Shawano	W.H.Cantwell, Shawano.	H. W. Partlow, Shawano.
Sheboygan	O. J. Gutsch, Sheboygan.	H. C. Reich, Sheboygan.
St. Croix	E.L.Boothby. Hammond..	L. P. Mayer, Hudson.
Taylor	E. LeSage, Medford.....	J. H. Francis, Medford.
Trempealeau-Jackson	G. N. Hidershide,Arcadia	Henry A. Jegi, Galesville
Vernon	J. K. Schreiner, Westby.	C.H.Trowbridge. Viroqua
Vilas	A.B.Rosenberry, Arbor V.	W. E. Wray, Minocqua.
Walworth	B. J. Bell, Genoa Junct'n	W. A. Loops, Darien.
Washb'n-Sawy'r-Burn'tt.	J.B.Trowbridge, Hayw'd.	E. R. Hering, Shell Lake.
Washington	H. Blank, Jackson.....	G. A. Heidner,West Bend
Waukesha	B. M. Caples, Waukesha.	A. J. Hodgson,Waukesha.
Waupaca	L. H. Pelton, Waupaca..	J. F. Corbett,Weyauwega.
Winnebago	G. M. Steele, Oshkosh...	S. B. Ackley, Oshkosh.
Wood	O. T. Hougen, G. Rapids.	F. Pomainville, G.Rapids

DANE COUNTY MEDICAL SOCIETY.

The first quarterly meeting of the Dane County Medical Society was held at Madison, April 12, when the following program was presented:

"Iritis." Dr. Edward Everett, Madison.

"Endothelioma of the Pia Mater." Report of Case. Photographs and Microscopic Sections. Dr. W. S. Miller, Madison.

"Hydrotherapy in the Treatment of Pneumonia." Dr. C. F. Farnsworth, Madison.

"Iris in the Treatment of Goitre." Dr. D. B. Collins, Madison.

"Appendicitis." Report of a Case. Dr. B. J. Wadey, Belleville.

"Actinomycosis Hominis." Report of case with exhibition of specimens showing fungus. Dr. R. H. Jackson, Madison.

"Pneumonia in the Infant." Dr. C. S. Sheldon, Madison.

The papers were very instructive and the meeting a very enjoyable one.

The Society is well organized and has a membership of 70, over 90 per cent. of the eligible practitioners in the county.

R. H. JACKSON, M. D., Secretary.

LA CROSSE COUNTY MEDICAL SOCIETY.

The regular monthly meeting of the La Crosse County Medical Society was held April 7, nearly all the members being present. Dr. C. H. Marquardt read a paper on *"Obstetrics, With a Report of a Case of Adherent Placenta."* A very free discussion followed.

It was voted that all members of the Society sign the Hepburn Pure Food Bill, and that the signatures be sent to our Representatives in Washington to thus urge them to pass favorably upon this bill.

A committee was also appointed to invite the Wisconsin State Medical Society to hold its meeting in 1905 at La Crosse.

C. H. MARQUARDT, M. D., Secretary.

MEDICAL SOCIETY OF MILWAUKEE COUNTY.

Meeting of April 8, 1904.

The President, G. E. Seaman, in the chair. 4 new members were elected. The program of the evening was a Symposium on Tuberculosis.

Dr. L. F. Jermain read a paper on *"The Municipal Problem."* He emphasized the necessity and propriety of reporting cases, of department disinfection, of regulation of milk supply, etc.

Dr. U. O. B. Wingate read a paper on *"The State and National Problem,"* giving a history of the development of the modern sanitorium treatment, and reviewed what had been done by the state and nation in prevention and treatment of tuberculosis.

Dr. C. H. Stoddard read a paper on *"Climatology,"* detailing briefly the advantages of Wisconsin climate in the treatment of tuberculosis.

The papers were discussed by Drs. Madison, Reich, Harrington, Teschan, DeBesch, McShane, Beffel, and Farnham.

A committee was appointed to consider the question of an educational lecture and exhibition upon tuberculosis, to be given by the society, and to report upon the feasibility of such a lecture at the next meeting. This committee was further instructed to consider the establishment of a hospital in Milwaukee County for the accommodation of the tuberculous poor.

A. W. GRAY, M. D., Secretary.

SHAWANO COUNTY MEDICAL SOCIETY.

A regular meeting of the Shawano County Medical Society was held on March 8.

Dr. W. B. Eicher, of Bonduel, read a paper on *"Hyperacidity and Its Relation to Other Diseases,"* which was freely discussed by the members present.

The remainder of the meeting was taken up with the regular routine business.

H. W. PARTLOW, M. D., Secretary.

WASHBURN-SAWYER-BURNETT COUNTIES MEDICAL SOCIETY.

The third meeting of this Society was held at Hayward, March 10. The following papers were read:

"The X-Ray in General Practice and Treatment." Dr. I. G. Babcock, Cumberland.

"Tuberculosis, With Especial Reference to Statistics of Its Prevalence Throughout the United States and the Favorable Showing of Wisconsin, Especially the Northern Half." Dr. Hopkins.

"Ophthalmia Neonatorum." Dr. J. P. Cox, Spooner.

"Medical Legislation." Dr. Storey, Hayward.

All of the papers were freely discussed.

At the conclusion of the program luncheon was served at the home of Dr. J. B. Trowbridge.

The next meeting will be held at Spooner, June 10.

A committee was appointed to prepare a fee bill to be acted upon at the next regular meeting.

E. R. HERING, M. D., Secretary.

FOX RIVER VALLEY MEDICAL SOCIETY.

The regular quarterly meeting of the Fox River Valley Medical Society was held at Appleton, Tuesday, April 19th, 1904, Dr. J. R. Minahan in the chair. About 40 members were present.

In the absence of Dr. Earles, who was to have read a paper on the *Surgery of the Thyroid Gland*, Dr. A. H. Levings gave an informal talk on the same topic.

A paper was read by Dr. J. R. Barnett of Neenah, on *Rheumatism and Allied Affections*. The chief emphasis of the writer was laid on differential diagnosis of both the acute and chronic forms of the disease.

In the discussion of the paper Dr. Ford, of Omro, dwelt on the rheumatic manifestations accompanying scarlet fever, and recommended the use of hot air in the treatment of the joint symptoms of gonorrheal rheumatism. Dr. R. E. Minahan of Green Bay stated that rheumatism which confined itself to one joint, or which consisted of severe pain in one joint should be regarded with suspicion. Genuine cases may be roughly classified as obese, requiring alkaline treatment; anemic, requiring iron; and sthenic, full-blooded patients, who need the salicylates in large doses. If a given treatment is going to benefit a patient it will generally do so in a short time. If no impression is made promptly it is probable that something else ought to be tried. Dr. Fairfield, of Green Bay, claimed that rheumatism as a disease is almost as rare as jaundice as a disease. In treatment oil of wintergreen per rectum is to be preferred to the salicylates per os. Dr. J. R. Minahan stated that about 90% of cases of neglected osteo-myelitis have been at some time in their history

diagnosed as rheumatism. Dr. Mills, of Appleton, stated that careful attention to the symptom-group will generally enable one to make a differential diagnosis, the main points being the fact that in osteo-myelitis the pain is not referred to the joint, but over the epiphysis, and is quite circumscribed; and the fact that there is local edema soon after.

After some executive business the Society adjourned.

J. S. REEVE, M. D., Secretary.

MILWAUKEE MEDICAL SOCIETY.

Meeting of March 22, 1904.

At the meeting of March 22, 1904, there were present 42 members and 9 guests. President Schiller in the chair.

By invitation, Dr. Daniel H. Williams, of Chicago, presented the following paper, *"Penetrating Wounds of the Thorax, Involving the Abdominal Viscera, Case of Successful Spleen Suture,"* in which it was insisted upon that perforating wounds of the thorax should be thoroughly explored instead of being treated expectantly. The author gave a report of seven cases in which he had gone fearlessly into the thorax and treated the wounds with much the same technic as though they had been abdominal. He cited cases in which the diaphragm had been perforated, making the wound both thoracic and abdominal. Photographic illustrations of the patients were exhibited. He reported a case in which a dagger had entered the thorax, perforated the diaphragm, and wounded the spleen. In this case he sutured the spleen. This is the first successful case of spleen-suture on record in America. A full explanation of the technic was given.

Discussion was opened by Dr. Shimonek and continued by Drs. Stoddard, Hardy and Beffel; closed by Dr. Williams.

Dr. Gessner read the opening paper of a series upon *Sensation and Motion,"* which is about to be published. He spoke of energy as manifested in two forms: (1) subjective, which gives rise to sensation; (2) objective, which gives rise to motion. Dr. Gessner exhibited a photograph which had been taken upon a dry plate held before one eye, while an image was reflected upon the retina of the other eye.

Dr. Beffel asked for an explanation of the photographic method. In closing Dr. Gessner drew diagrams of the apparatus used. A vote of thanks was extended to both gentlemen for presenting such excellent and important papers before the Society.

The members and guests then moved into the adjoining rooms where refreshments were served and an informal reception was held.

Meeting of April 12, 1904.

At the meeting of April 12, 1904, there were present 34 members and 1 guest. President Schiller in the chair.

Dr. Richard Dewey read a paper on *Syphilis as a Cause of Psychoses Other Than General Paralysis."* (This paper appears among the original articles in the present issue of the JOURNAL.)

Discussion by Drs. Brown, Rogers, Studley, Schiller, Mishoff, Seaman, Beffel, Kaumheimer, Myers, Burgess and Hay. Closed by Dr. Dewey.

Dr. W. T. Nichols was prevented by illness from presenting his paper on *"Hemorrhage in the New-Born."*

H. E. DEARHOLT, M. D., Secretary.

NORTHWESTERN WISCONSIN MEDICAL ASSOCIATION.

The meeting of the Northwestern Wisconsin Medical Association held at Stevens Point, April 12th, was not only a most profitable one, but by far the best attended meeting of the year, members being present from Milwaukee, Oshkosh, Wausau, Merrill, Marshfield, Colby, Stevens Point and other smaller places. The following papers were read and discussed:

"Some Rare Forms of Fractures and Dislocations of the Leg," Dr. C. O. Thienhaus, Milwaukee.

"Ulcer of the Bladder," Dr. Karl Doege, Marshfield.

"Vaginal-uretero-plasty," Dr. Michael Ravn, Merrill.

"Treatment of Typhoid Fever," Dr. C. von Neupert, Jr., Stevens Point.

President's Address—"The Relation of the General Practitioner to the Specialist," Dr. D. Sauerhering, Wausau.

The following places were selected for the coming meetings—July at Waupaca, October at Marshfield, January at Wausau, and April, the annual meeting, at Stevens Point. It was also decided to make the social feature quite prominent during the coming year, combining business and pleasure. The evening following each meeting will therefore be devoted to a social session and smoker, the entertainment to be arranged by the local members of the society where the meeting is held, the expenses to be paid from the funds of the society.

This being the annual meeting the reports of the Secretary and Treasurer were read and accepted. The report shows the financial condition to be good.

A committee, consisting of Drs. Steele, Doege and Gregory, was appointed to draft resolutions on the death of our late member Dr. W. M. Graham of Auburndale, copy to be sent to the family and entered on the records.

By unanimous vote the old officers were re-elected as follows: President, Dr. D. Sauerhering, Wausau; vice-presidents, Drs. F. A. Southwick, Stevens Point, L. H. Pelton, Waupaca, Karl Doege, Marshfield; secretary and treasurer, C. von Neupert, Jr., Stevens Point; censors, Drs. C. H. Frost, Plainfield, L. H. Pelton, Waupaca, W. W. Gregory, Stevens Point.

C. VON NEUPERT, JR., M. D., Secretary.

TENTH DISTRICT MEDICAL ASSOCIATION.

The Tenth District Medical Society organized at Rhinelander, April 8th, 1904, with Dr. I. D. Steffen, of Antigo, as President and Dr. D. H. Lando, of Hurley, as Secretary and Treasurer.

The following committees were appointed: Committee on Constitution and By-Laws, Drs. T. B. McIndoe, J. M. Dodd and F. E. Winneman; Committee on Programme, Drs. W. T. Rhinehardt, H. L. Garner, H. A. Lathrop, M. Ravn, and Dr. Rosenberry.

The attendance was very good and all those present were agreeably entertained. A visit to the newly erected paper mill was very much enjoyed by all. A very sumptuous banquet was tendered us in the evening by the Rhinelander physicians, for which our entertainers have our best thanks.

Our next meeting will be held at Ashland, September 15th, 1904, and we look forward to a large attendance.

D. H. LANDO, M. D., Secretary.

WILLS' HOSPITAL OPHTHALMIC SOCIETY OF PHILADELPHIA.

A stated meeting of the society was held at the Hospital on the fourteenth of March, 1904.

THE CHAIRMAN, DR. WILLIAM ZENTMAYER, announced that there would be an informal discussion upon *glaucoma*.

DR. FRANK FISHER, in order to open the subject, cited the histories of two diametrically opposed types of such cases which had recently come under his observation. He desired to know under what conditions an iridectomy should be performed; when should enucleation of a glaucomatous blind eye be done; and if enucleation be done, what effect would the procedure have upon the fellow eye. He was uncertain as to the character of the visual fields serving as a guide to the value of an iridectomy, they being so unstable and uncertain. His experience had led him to ignore the usefulness of the degree or the grade of visual acuity as offering itself as a therapeutic guide. In some eyes which had become blinded from glaucoma processes, he had found that eserine failed to produce pupillary contraction. He had been interested in studying a series of cases of glaucoma, in which there had not been any consanguineous marriages; he gave the detailed history of one such family, and had more or less knowledge of some others. He inquired what had been the experience of members of the society in regard to the ophthalmoscopic appearances of the eyeground and media after the performance of posterior sclerotomy. He asked this question as he had seen two cases in which he could locate the position of the internal traumatism by a localized rupture of the chorioid. He would ocular tension in cases in which posterior sclerotomy had been done. He asked the question whether vitreous elements were reformed or not. He would like to know if any members of the society had, like himself, seen recession of optic nerve head cupping after successful iridectomy.

The chairman stated that he enucleated the offending eye in absolute glaucoma, with a possible previous attempt at iridectomy. He performed an iridectomy if possible, in acute inflammatory glaucoma. His studies with the visual fields in chronic glaucoma, had taught him that the character of decreases and the peculiarities of lessened areas were not in any way characteristic or typical.

DR. CONRAD BERENS believed that enucleation tended towards the conservation of the energies of the other eye; his experience being that vision and intraocular tension of the remaining eye are preserved for much longer periods of time. His experience had taught him that the earlier an enucleation is done—particularly in a painful eye—the safer it is for the other one. If possible, he preferred an early iridectomy in all appropriate cases. In some cases of systemic type he eschewed all forms of operative procedure and preferred to wait for some acute condition necessitating radical measures, watching and guarding over the general system, and directing his main therapy towards the general dyscrasia at hand. He had found good results from the ingestion of large doses of iodide of potassium in association with the salicylates. He had found that the more he had to deal with the condition, the more he depended upon remedial measures, reserving as a rule operative interference for cases of the fulminating type. He had observed the effects of climate

upon such cases, and spoke of the effects of psychological processes upon the condition of the patient. He mentioned his experiences with the results that he had obtained in some of his chronic cases by the employment of varying strengths of synoidal currents.

DR. MCCLUNEY RADCLIFFE showed a case under his care in the hospital in which by enucleation of the blind eye, in combination with appropriate local and general treatment, the ordinarily seen progressive and disastrous symptoms, he felt sure, were rapidly and painlessly disappearing in the fellow eye.

DR. CHARLES A. OLIVER said that no fast and hard law could be laid down in any particular case; each one, and even the same case at different times, demanding what might be aptly termed "symptomatic treatment." After a large experience with various operative measures, in association with carefully graded local and general therapy, and above all, hygiene with well regulated cheerful surroundings, and early treatment directed towards the removal of any possible offending dyscrasia, he had in many cases, ceased to be disturbed as to the probability of ultimate failure; in other words, he made it an unalterable rule to exercise constant vigilance against the general and special inroads of any causative factor with the prompt removal of the disturbing local conditions in the easiest and the most conformable way possible in each case. Whenever possible, he enucleated an eye which had become blinded from glaucoma, as he had learned from experience that it was the safest and the most certain of all of the radical procedures in certain types of cases for the good of the fellow eye; in fact, he was certain that it undoubtedly seemed to have a beneficial influence upon the fellow organ, whether it was injured or not. The question of the performance of an iridectomy he reserved to cases in all stages, more particularly the incipient and practically unadvanced ones in which he felt that there was either a present necessity or an advantage in the future to be gained by opening as much as possible of an imperfectly acting filtration angle. In some cases of coarse severity, he repeated the iridectomy and even had successfully and usefully removed the crystalline lens. He uniformly reserved his operative procedures to the individual organ in question. He spoke of having seen some cases in the hands of some of his colleagues apparently do well by the employment of cyclotomy, and believed that the measure, if not too disturbing in its immediate traumatism, possibly did good by destruction of some of the lymph-making glands. He asserted his disbelief in a proper regeneration of the vitreal elements, believing the vitreous to be like the crystalline lens, an organized body, which once removed or destroyed, was replaced with ordinary lymph; in consequence, he doubted the efficacy of all procedures in which loss of the vitreous body constituted a part. He denounced the term "liquid or fluid vitreous", and said that the replacement of the vitreous humor by ordinary lymph in which there were loose vitreal elements with uveal debris, merely tended to provoke glandular action with consequent increase of the intraocular fluids. He spoke of the classical experiments of Uribe Troncoso upon the effects of altitude upon the density of the intraocular fluids, as well as the morphological conditions of the fluids themselves. As one of the results of a return of intraocular pressure to normal, he had more than once seen temporary lessening and even disappearance of shallow pathological cuppings in the optic nerve head, particularly in the temporally placed finer fibres.

DR. S. LEWIS ZIEGLER spoke of the advantages and the good results he had personally obtained in certain varieties of cases by the performance of posterior sclerotomy. He made the procedure by a quick plunge with a von Graefe knife, with its back directed towards the ciliary body some six or eight millimeters back of the ciliary region, between the muscular attachments, and parallel with the radiating vessels. He rotated the knife at right angles to the first incision, allowed a few beads of vitreous to escape, and withdrew the instrument, thus making a T incision. He had found that there is immediate hypotension and there is never any reaction. His experiences had coincided closely with those given by Dr. Oliver. In the blind eyes of some such types he had had useful recourse to opticociliary neurotomy, having, he remembers in more than one instance, kept a functionless eyeball intact and free from pain and harmful influences for a period of nine years. He mentioned several interesting examples of the various conditions, showing the multiplicity and variability of the symptom-complex in cases which had come under his immediate observation; distinctly proving the efficacy of certain procedures in some cases, and the inefficiencies of many authoritative measures that had been strictly applied, in others. The more extended his experience had become in such an enormous mass of material as was almost daily given him in such a large service as in the outpatient department of the hospital, the broader and the more conservative had become his views in regard to therapeutic measures. He was daily waiting for opportunity, and was more than willing to apply any plan of therapy which offered in the least a greater chance for the patient's welfare. Upon being asked whether he would do an iridectomy at the time of the appearance of the earliest signs and symptoms of the disease, he answered that he would in appropriate cases. He had never had any intraocular complications of inflammatory type to arise after the performance of posterior sclerotomy. In a number of painful cases in which immediate operative procedure could not be done, he had most useful recourse to a formula containing hyoscine hydrobromate, morphine, strychnine and pilocarpine; a combination which not only subdued pain, but which both stimulated and controlled lymph circulation. In support of his claim for the value of these therapeutic agents, he cited three most interesting confirmative cases which he had seen at the hospital several years previously. In the use of electricity he had had considerable experience, finding a most curious paradoxical result that pain and tension are reduced when the negative electrode is applied to the eyeball. In his hands, pneumo-massage had given but moderate effects in some cases of chronic glaucoma.

Pathogenesis of Scoliosis in Children— DEUTSCHLANDER (*Ztschr. f. orthopäd. Chir.*, XI, 2, 1902) agrees with v. Recklinghausen in that this is caused by infantile osteomalacia. It is distinguished from rachitis in being a pure degeneration. The anemia so often present in habitual scoliosis can also be referred to the diseased skeleton, the influence of bones on blood building being well known. The accompanying flatfoot, genu valgum, etc., also speak for infantile osteomalacia as the causative factor. (G. P. B.)

BOOK REVIEWS.

Physiological and Pathological Chemistry.— PROF. DR. E. SALKOWSKI. Translated by R. E. Orndorff. (Published by *John Wiley and Sons*, New York.)

The appearance of Orndorff's translation of Salkowski's "Practicum der Physiologischen und Pathologischen Chemie" will be hailed with delight by those who either as teachers of this branch or as progressive practitioners desirious of doing scientific work, have long felt an urgent need of just such a publication. While a number of writers, American and English, have given us a result of their work along this line, and many of them detailed their methods, but one or two, so far as we know—and these teachers of the subject—have written with the purpose of furnishing a laboratory manual which could be used alike by student and practitioner with advantage. In some of these the non-essential and theoretical problems have occupied too large a portion of the text, making the work incomprehensible to the beginner and too complicated for adoption in the office of the average physician. In others the methods given have not extended to those factors and processes which are of great clinical significance, and hence should have been considered.

The subject of physiological and pathological chemistry has for some years been conceded to be one of the most important of the foundation studies of a medical education, and within the last few years nearly every reputable college in this country has established a course, largely laboratory, for instruction and demonstration in this important branch. As a result of this, there has been a general demand for a laboratory manual of such content and scope that it could be used as the basis of a course of instruction in this department of chemistry.

To meet the requirements it should not be so extensive as to demand too much time, nor so intensive as to be beyond the ability of the student to comprehend. Nor should it demand for the performance of the experiments given, a greater amount or more complicated apparatus than is to be found in the average well-equipped laboratories of our colleges.

Orndorff's manual meets all these conditions. The work outlined, while comprehensive, is not more than can be performed with profit by the medical student, and while quite detailed is still so clearly described and directions are so explicitly given that with the apparatus usually at hand, the average student or any physician, with a few brief instructions, can readily perform any of the experiments outlined. The chapters which will probably be of the greatest interest to physicians because of their bearing on clinical diagnosis, are those treating of milk, gastric contents, pathological transudates and cystic fluids, the analysis of biliary and urinary calculi and of the urine and the faeces.

The author has omitted special consideration of what constitutes a large portion of most of the books on physiological chemistry, *viz.*, the discussions and analyses of the various compounds constituting the food stuffs. There are no chapters devoted especially to carbohydrates or fats or proteids, but instead he has fully and in detail considered the analysis of bread, meat and muscle tissue, egg and adipose tissue, and thus incidentally given the known facts concerning, and the analytical methods employed in the detection, isola-

tion, identification and quantitative estimation of these fundamental principles as constituents of the above enumerated articles of diet.

A chapter devoted to the analysis and reactions of the putrefactive products of the proteids will be of much interest particularly to those who from the knowledge of, and experimental work with, these compounds, expect and await your confidence, the solution of the great problem of the synthesis of the proteids along this line. For it is evident that it is only by an exhaustive study of the substances resulting from the decomposition of these complex bodies, that we can hope to determine the composition and constitution of them and thus be enabled to synthetically produce them in the laboratory.

In the chapter devoted to the analysis of milk, the author has given simple methods of determining qualitatively and quantitatively the various constituents of this important article of diet. In addition to describing methods for estimating water, solids, ash, fat, sugar, phosphates and proteids, he gives methods for separating and estimating the various classes of the proteids. The value of such an examination must be apparent to any one who is at all interested in the synthesis of infant foods.

Nothing new is to be found in the discussion and analysis of gastric contents, but the chemical processes involved are so simply and clearly stated that any one at all familiar with laboratory technic will experience no difficulty in performing the work outlined. We are pleased to note the presence of the chapter devoted to the methods of analysis of pathological transudates and cystic fluids.

Such analyses correctly interpreted lead to more accurate diagnosis of the nature and significance of these fluids. Likewise the analysis of calculi, biliary and urinary, to determine their composition, may often enable the physician to institute such treatment as shall prevent re-formation.

While most physicians perform a more or less complete and thorough qualitative analysis of the urine, it is a lamentable fact that but few proceed farther for the purpose of determining quantitatively the amount of the nitrogenous principles or the inorganic constituents, or the aromatic compounds which are normal constituents, but which being present in abnormal quantities, give positive indications of diseased conditions. Salkowski has given simple and clearly described methods requiring in the main but little and inexpensive apparatus, by which all the normal and abnormal constituents can be detected and determined.

The examination of feces has not been very extensively employed among physicians, and this probably because the data obtained have no very pronounced or definite pathological or clinical significance, except in a few cases in which it becomes necessary to differentiate between mucous or serous stools or to determine the presence of putrefactive products. The analytical methods here given extend to the determination of water, solids, ash, proteids, fats, carbohydrates and the putrefactive products. The results so obtained, may yield important data of great significance in determining the efficiency of the gastric function and the intestinal processes.

Of the work as a whole, it must be said that it is most excellently written and arranged. Its scope is not greater than could be conveniently and profitably incorporated into the curriculum of any medical college course. The intention of the work is not so profound as to carry the student beyond the realm of the readily comprehensive or into discussions or experiments

which are of little practical value. Beside this, the facts are clearly stated, the experiments carefully explained. The material required—both reagents and apparatus—is not more than is usually found in a fairly well equipped laboratory or office, so that the work may, as it deserves, find a field of usefulness both as a text book in many of our colleges, and as a guide to the practitioner in the performance of his analyses in the office. O. F.

Manhattan Eye and Ear Hospital Reports, Number III, March 1904. JONATHAN WRIGHT, M. D., Editor; EDGAR S. THOMPSON, M. D., and ARTHUR B. DUEL, M. D., Associate Editors.

This is a compilation of thirteen most excellent papers written by members of the staff of medical officers of the Manhattan Eye and Ear Hospital. The papers selected for this number are:

Metastatic Carcinoma of the Choroid, with Report of a Case and Review of the Literature, by E. L. OATMAN, M. D., Surgeon and Pathologist Eye Department.

Insufficiency of Divergence as an Etiological Factor in Concomitant Convergent Strabismus; its Importance, Determination and Treatment, by DR. HERBERT WRIGHT WOOTTEN, Assistant Surgeon Eye Department.

The Surgical Treatment of Entropion and Trichiasis, by MATTHIAS LANCKTON FOSTER, M. D., Assistant Surgeon Eye Department.

The Limits of Variation in the Depth of the Mastoid Antrum, by PHILIP D. KERRISON, M. D., Assistant Surgeon Ear Department.

Epithelioma of the Ear, by W. H. HASKIN, M. D., Assistant Surgeon Ear Department.

Acute Otitis Media, Cerebellar Abscess; Operation. Death from Meningitis, by WENDELL C. PHILLIPS, M. D., Surgeon Ear Department.

The Possibilities and Limitations of the Electrolytic Bougie in the Treatment of Chronic Catarrhal Otitis, by ARTHUR B. DUEL, M. D., Surgeon Ear Department.

Temperature after Mastoid Operation; Analysis of 100 Cases, by THOMAS J. HARRIS, M. D., Assistant Surgeon Ear Department.

The Early Appearances, Diagnosis and Treatment of Tuberculosis of the Upper Air Tract, by WALTER F. CHAPPEL, M. D. M. R. C. S., Eng., Surgeon Throat Department.

Notes from the Throat Department of the Pathological Laboratory of the Manhattan Eye and Ear Hospital, by JONATHAN WRIGHT, M. D.

Paraffin Injected Subcutaneously for the Correction of Nasal and Other Deformities, by HARMON SMITH, M. D., Assistant Surgeon Throat Department.

A Case of Paraffin Injected Into the Nose Followed Immediately by Blindness Due to Embolism of the Central Artery of the Retina, by LEE MAIDMENT HURD, M. D., and WARD A. HOLDEN, M. D.

A Case of Epithelioma of the Larynx; Thyrotomy. Recurrences and Death in Four Months, by CHAS. H. KNIGHT, M. D., Surgeon Throat Department.

These papers have all been previously published in different journals, but binding them together in one volume is a most excellent idea and makes a valuable book. (J. S. B.)

CURRENT LITERATURE.

DISEASES OF THE EYE, EAR, NOSE AND THROAT.

C. Zimmermann, M.D., G. E. Seaman, M.D., H. B. Hits, M.D., N. M. Black, M.D., J. S. Barnes, M.D.

Modern Treatment of Dacryocystitis.— WIENER (*Medical Record*, Apr. 2, 1904), argues against the so-called conservative treatment and in favor of a more rational and radical treatment of this class of cases. He lays great stress upon early treatment of stenosis of the nasal duct and observation and treatment of the nasal conditions.

In cases of true organic stricture of the duct, Wiener resorts to the removal of the anterior portion of the inferior turbinal, its lacrymal process, together with the inferior turbinated crest on the superior maxillary bone, laying bare the membranous canal of the duct and slitting it up to the neck of the lacrymal sac. This meets the indications in some cases.

The author points out the indication for extirpation of the lacrymal sac, and describes the various steps of the operation and says in regard to the after-effects of extirpation in suitable cases: "There appears to be everything in favor of extirpation and nothing to say against it." (G. E. S.)

Ocular Injuries During Labor.—WALTER L. PYLE, (*Amer. Med.*, April 16, 1904) in editorial comment, says: "Even in the course of natural labor, injuries to the eyes of the child are not uncommon. Traumatisms of the eyelids with resultant edema and ecchymosis, conjunctival hemorrhage and chemosis are often seen. According to Thomson and Buchanan there sometimes occur, in what may be termed natural, normal, or unassisted labors, retinal and choroidal hemorrhages.

De Wickey cites a case of face presentation in which an orbit was mistaken for an anus in a breech presentation, and the eyeball gouged out by the obstetrician's finger. In case of labor necessitating the use of forceps, injuries to the eyeball and adjacent parts frequently occur. The chief injuries from the pressure of the blades of the forceps are excoriations, edema, fracture of the orbit, corneal affections, hyphemia, paralysis of the ocular and lid muscles, retinal and retrobulbar hemorrhage, optic atrophy, cataract, dislocation of the lens, exophthalmus and avulsion of the eyeball. Thomson and Buchanan call attention to a peculiar form of traumatic keratitis, which, from microscopic examination, they believe to be due to vertical rupture of the posterior elastic corneal lamina. This affection varies in severity from a transient haziness to more or less permanent opacity. Stanheim has observed edema and cicatricial entropion following forceps delivery. In fact, almost every form of ocular injury has been mentioned as proceeding from forceps delivery; yet, the evil results are small in comparison with the enormous number of cases in which this instrument is applied. It is fair to assume that in a vast majority of cases if forceps are used with ordinary care and skill, permanent ocular injury is not likely to follow." (J. S. B.)

Delirium After Eye Operations.—C. E. FINDLAY, Havana, Cuba, (*Archiv. Ophthal.*, Jan., 1904) discusses the various external causes of delirium after eye operations, such as the natural fear of the operation, different environment, the shock of operation, and the occlusion of both eyes; but none

of these give a satisfactory explanation, and the author is inclined to the theory of Fromaget, who considers delirium as the result of an auto-intoxication, most often uremic, and due to the accumulation in the system of some excrementitious products brought about by some renal insufficiency, and which is made patent by diminution in the amount of urine, in its specific gravity, or in the proportion of urea.

A case is reported to support his views. (N. M. B.)

Neural Anastomosis in Facial Palsy.—(*Prog. Med.*, March 1, 1904)—An article summing up the various results by Ballance and Stewart, Korte, Faure, Kennedy, Cushing, Frazier, Spiller and others in Neural Anastomosis for the cure of Facial Palsy, describes the various operations done, and the several grades or degrees of improvements resulting therefrom.

Of the six cases by Ballance and Stewart, five were uniting the severed end of the Facial with the Spinal Accessory, the distal end of the former being sewn into the sheath of the latter. The sixth being a similar union with the hypoglossus. That of Cushing's was an end to end anastomosis of the Facial and severed Spinal Accessory, he deeming the resulting droop shoulder as of less importance than the distorted face.

Spiller favors the hypoglossal nerve, as the cortical centre of it and the facial are functionally more closely allied. The difficulties seem to be the inability to completely disassociate the movements of the various groups of muscles, where the nerve selected has not been severed, so that in most of Ballance and Stewart cases, while showing marked improvement in the symmetry of the face, movements of the shoulder were accompanied by twitching of the face. The results would seem to indicate 3 degrees of improvement; the first being the restoration of the normal muscular tone and improvement in the symmetry of the face; the second being the restoration of voluntary control of various individual muscles; for then, not only is the face symmetrical in repose but is also symmetrical in action. This has been so in the majority of cases.

The third grade being the complete return of emotional expression. The mechanism of this is a much more complicated matter. "This is the ideal result, but one that has not yet been obtained."

The concensus of opinion seems to favor end to end anastomosis—with the hypoglossus—and Nicoll has suggested an ideal possibility, *viz.*: that of grafting the distal end of the cut hypoglossus to its fellow on the opposite side, thereby preventing paralysis of one side of the tongue. (H. B. H.)

Platinum Rhinitis.—LORENZO B. LOCKARD (*Annals of Otol., Rhinol. and Laryngol.*, Volume XII, No. 4), reports a case in a photographer, who was devoting almost his entire time with the popular platinum prints, and which had been diagnosed as hay fever. At first the symptoms never appeared until he had been at work in the dark room for thirty to ninety minutes and rapidly subsided upon reaching the open air, but at present they occur within a few minutes and no not completely subside. In handling other prints the attacks do not occur. They were caused by the use of the dry paper, as he never suffered if the previously cut paper had been immersed in the bath. The author has seen five cases in the past year with almost identical histories. The fifth differs in one important particular. While paroxysms are precipitated by handling the dry paper, they are also produced by the use of the

platinum toning solution with which the American Aristo paper is treated. This solution is composed of phosphoric acid and platinum chloride, and the symptoms can be definitely ascribed to the platinum, for, while phosphoric acid may produce rhinitis, it is of a different type from the one here seen. The absence of any ulceration or cartilage necrosis in the cases, would indicate that the action of the platinum is purely mechanical. As to treatment, he finds there is no effective procedure aside from change of profession or the discontinuance of work with this particular substance. (J. S. B.)

Sublamin.—IMRE (*Wochenschr. f. Ther. u. Hyg. des Auges*, VII, 4), reports upon the use of sublamin, or ethylene-diamene-mercury-sulphate. It is said to combine the powerful germicidal action of sublimate of mercury with the mildness of boracic acid.

Imre has found it very useful in the treatment of conjunctivitis in a solution of the strength, 1-1000. If, however, it is used too frequently it is liable to injure the corneal epithelium and cause the formation of a false membrane. (This hardly accords with the statement of its mildness.)

(G. E. S.)

Dionin.—WENDELL REBER (*Ther. Gazette*, Feb., 1904.), gives his personal experience with Dionin. He has used it in a variety of conditions including: Iritis, Interstitial keratitis, Vitreous opacities, Glaucoma, Corneal opacities, Post-operative complications, etc., with varying but generally excellent results.

Dionin is an analgesic, a vaso-dilator and lymphagogue. Its use is often followed by rather alarming reaction but no bad results ensue. Reber has used it only in five and ten per cent. solutions and says that it is to be borne in mind that the eye rapidly develops a tolerance for the drug. (G. E. S.)

Optic Atrophy Following Iodoform Poisoning.—WALTER H. SNYDER, (*Ophth. Record*, March, 1904) reports the case of a patient who was treated for hernia in an advertising hospital by injection of carbolic acid, the sloughing area being dusted with iodoform. This was followed by a decided taste and odor of iodoform, and in about 20 days everything had a greenish color. A month later he was unable to read, the lenses having central opacities and nerves being pale and atrophic. Treatment was based on elimination of drug and improvement of general condition. Colored vision persisted nearly one year and patient could not read for a year and one half. Present condition about five years after first symptoms were noticed: the lenses have cleared up with the exception of the opacities, making these stand out much clearer, vision about same, general condition never better. Says pavement with right eye has yellow tinge, and with left eye reddish tinge. The case presents a few new features, noticeably the colors noticed. Field for white varies at times. Colored fields seem to remain stationary. (N. M. B.)

Corneal Ulceration Due to Nasal Infection.—S. LEWIS ZIEGLER (*Amer. Med.*, April 9th, 1904), says there are three different avenues for the transmission of disease from the nose to the eye: (1) by the lacrimo-nasal duct, (2) by the blood and lymph streams, (3) by reflex action through the nervous system. Then transmission through the lacrimo-nasal canal is the only one considered. The discussion is limited to ulcerative lesions of the cornea which he subdivides into three varieties—the simple, the phlyctenular and the

sloughing. Accompanying the local symptoms is a characteristic clinical picture that cannot fail to indicate the diagnosis. There is intense photophobia, which the child attempts to alleviate by burying its head in a pillow or in the folds of its mother's dress. There is marked blepharospasm, the lids being gripped together so tightly that it is almost impossible to open them. Lacrimation is often excessive, and occasionally a muco purulent discharge is present. The nasal secretions are viscid, acrid and irritating, often hanging down on the lip and causing eczematous excoriation. Occasionally the face is covered with an acneous eruption, and the skin of the whole body appears ashy-pale, relaxed and leaky, being bathed in perspiration, while the hair is matted together by the excessive moisture present.

The nasal etiology of these corneal lesions involves many factors which are discussed in detail. The manner of infection from the nose through the lacrimo-nasal duct and that the lacrimo-nasal duct itself is a fertile nidus for bacterial development, is clearly shown.

The micro-organisms that have been most frequently found in these conditions are the pneumococcus, the staphylococcus, and the Klebs-Löffler bacillus, while the streptococcus and the gonococcus of Neisser are infrequent factors of infection.

That there is a constitutional element in the disturbance must not be overlooked, and that in children the exanthems are immediately or remotely responsible, while teething is frequently a causative agent.

The treatment is considered under four heads, that of the nose, the tear duct, the eye, and the system, epitomized briefly:

1. The nose should have antiseptic irrigation and local treatment applied.

2. The lacrimo-nasal duct should be disinfected or dilated.

3. The eye should have a soothing lotion, a mydriatic instilled, and a cauterant applied to the ulcer, if necessary.

4. The diet should be regulated, tonic and antiphlogistic treatment given, and the hygiene generally improved. (J. S. B.)

Muller's Trachoma Bacillus and Conjunctivitis, caused by the Influenza-bacillus. —ZUR NEDDEN, BONN, (*Klin Monatsbl. für Augenheilkunde*, 1904, p. 47.) refutes the assertion of Müller that M.'s bacillus, found in numerous cases of granular conjunctivitis and being identical with the influenza bacillus, is the morbid agent of trachoma. He rather thinks that in those cases of trachoma in which M. found this bacillus, influenza conjunctivitis was simply superimposed upon trachoma. This explains the identity with the influenza bacillus. (C. Z.)

Double Congenital Kerato-Iritis.— G. W. THOMPSON, (*Ophthalmic Review*, April, 1904) reports an unusual case of congenital double Kerato-Iritis in an infant seen nine days after birth. There was a general haziness of the cornea affecting the middle and deeper layers. The surface was not broken and there had been no discharge from the eyes and no indication of the cornea having been perforated. The tension was increased in both eyes, with little pain. The remains of the iris was glued to the back of the cornea, the adhesion extending to the extreme periphery in each eye. There was no history of hereditary syphilis and no signs of gonorrheal ophthalmia. The case was thought to be one of tubercular origin. (G. E. S.)